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Cover: Valerie Lovett, "Use of Staff Output Measures in the Wake County Public Library System," *North Carolina Libraries* 48 (Fall 1990): 173.

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Libraries

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From the President

Productivity, Literacy, and Democracy. We are dealing with some heavy issues in libraries this fall! Issues that are important in the libraries that we are designing to meet the needs of the nineties and beyond.

I hope each of you has given these issues some serious thought as you have attended, or make plans to attend, your regional Governor's Conference on Libraries. It is not often we get the opportunity to share what we think about libraries and their future with such a large audience. The Division of State Library has done us a great service by scheduling regional conferences within easy driving distance of every citizen in North Carolina. It enables us to attend and to encourage trustees, friends, and government officials to contribute to the issues and resolutions that will be taken forward to the State Governor's Conference and then to the White House Conference on Libraries and Information Science.

The conferences in Charlotte (where Governor Martin was the speaker), Durham, Deep Run, and Winston-Salem were enlightening. Each conference included representatives from libraries, the general public, government officials, and trustees. Yet to come are the conferences in Supply, Franklin, Lenoir, Elizabeth City, and Rockingham. If you haven't yet participated in this important activity, PLEASE DO. It is not only important for libraries, it is important for North Carolina. Call your local public library if you need more information.

Many of the sections and roundtables have had meetings and/or workshops during the late summer and early fall. I don't dare to mention any of them specifically for fear of leaving one of them out. Let me tell you, though, that our association continues to amaze me with our ability to offer such valuable continuing education opportunities. The sections and roundtables seem to have an endless supply of innovative and creative ideas for offering workshops that are very worthwhile. Again, I am proud to say I am part of the North Carolina Library Association.

Have you made your reservation for the NCLA bus to Nashville? You should have received a flyer from Jerry Thrasher (Cumberland County Public

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for the 90's

Library, 300 Maiden Lane, Fayetteville, NC 28301) about the December trip to the Southeastern Library Association Conference. If not you should contact him right away to be sure you will be included. The cost is only $99.00 round trip. I hope we will have a large number of North Carolina participants in the SELA conference. I look forward to seeing you there!

Barbara Baker, President

Over to You

Letter to the Editor

Dear Editor,

My attention was recently drawn to a letter from Tom Broadfoot to the editor of *North Carolina Libraries*, published in the summer 1990 issue. In that letter, Mr. Broadfoot referred to a conversation he had with me in early May 1990, about leather dressings. I have several comments in regard to the letter.

First, I wish that Mr. Broadfoot had informed me that he was publishing an article on this subject. I appreciate that he accurately reflected my advice to him on leather dressing (i.e., don't use Vaseline on books). However, it would be common courtesy to let me know about the article if he were talking with me as a part of his "research" into the issues. Furthermore, he should have verified my name before referring to me in print.

Second, if he has taken the trouble to seek advice on leather dressings from an expert and then confirm suggestions by contacting other experts, I wonder why he does not bother to pay attention to that advice. There is an extensive body of knowledge on preserving skin-based artifacts; however, not all artifacts can or should be treated the same way. Vaseline for shoes may be acceptable (although a cobbler may disagree), but then no one expects their shoes to last for hundreds of years.

Third, I am honored that Mr. Broadfoot has associated me (a preservation administrator) and my advice with Jan Paris, a respected *conservator* with a professional reputation that speaks eloquently of her quality, character, and ethics.

Sincerely,

Sandra Nyberg
Preservation Program
SOLINET

Foreword

Jinnie Y. Davis and David M. Paynter, Guest Editors

The concept of measuring a library's performance by objectively quantifying its outputs — its services and programs — was introduced to the library profession at least two decades ago. The overflow audiences at two sessions on performance measurement at the American Library Association's annual conference in Chicago attest to the continuing interest of librarians with the use of output, rather than the traditional input, measures of how well our libraries are performing. With the newly published manual *Measuring Academic Library Performance* to supplement the 1987 *Output Measures for Public Libraries*, librarians now have at least two basic tools to draw upon in carrying out performance measurement in a relatively easy, inexpensive, and pretested manner.

The timing of this issue of *North Carolina Libraries* is intended to keep the idea of performance measurement alive in the minds of North Carolina librarians by exploring various aspects and applications in several types of libraries. First, Sharon Baker differentiates between macroevaluative and microevaluative measures and challenges us to go beyond the former — the collection of quantitative data to explain *how well* a library operates — to incorporate microscale studies that will help us answer the questions of *how* and *why* the library operates in that way. Baker is also the co-author, with F. W. Lancaster, of the second edition of another seminal work on library evaluation, *Measurement and Evaluation of Library Services*.

Measurement implies the need for quantitative data, and Kitty Smith explores the need for reliability in data collection by public libraries. In particular, she explains the role of the nationally coordinated Federal-State Cooperative System for Public Library Data in ensuring that comparative data on public libraries will be available to help future decision makers.

Jinnie Y. Davis, Library Research in North Carolina editor of *North Carolina Libraries*, is Assistant Director for Planning & Research at the North Carolina State University Libraries, and David M. Paynter is Director of the New Hanover County Public Library in Wilmington.

Public libraries in general have had a longer history of performance measurement than other types of libraries. Three library directors describe their experiences in assessing public libraries of North Carolina, with sometimes surprising results. Val Lovett reports on data collection on output measures in the Wake County Public Libraries. James Govern (Stanly County Public Library), reporting on the Childers/Van House multiple constituencies model and on other output measures developed by the Public Library Association, shows how even a small public library can make effective use of performance measures. Patsy Hansel discusses the use of the Bunge/Murfin method of unobtrusive testing of reference services at the Cumberland County Public Library & Information Center.

The application of performance measurement to youth services has not received a great deal of attention in the literature. Rebecca Taylor offers a step-by-step approach to undertaking such measurement techniques and includes an evaluative review of the relevant literature.

Another area deserving more investigation is the use of performance measures in the technical services. Croneis and Wang explore issues dealing with the efficiency and effectiveness of technical services and emphasize the need for libraries operating in an automated environment to take a holistic view of performance measurement.

Automation in libraries offers us entirely new ways to collect quantitative data for gauging the performance of a library system. Ulmschneider and Mullin examine online performance measures and describe the system-monitoring tools and their management uses at the Triangle Research Libraries Network.

Two articles on academic libraries employ the case study and the survey methodologies to increase our understanding of performance measures. Patricia Kelley describes her experiences with one of the best-known examples of the application of performance measures in an academic library, at George Washington University. She emphasizes the importance of educating the library staff before establishing a performance measures program. A continuing and widespread reliance on traditional evaluation programs, existing simultaneously with a belief in the importance of true performance measurement, are seen in the results of Sally Ann Strickler's survey of academic library administrators.

Finally, Cynthia Levine's annotated bibliography offers the reader wishing to delve into the literature on performance measurement some recommended points of departure. We regret the lack of coverage of school librarianship in this issue, stemming from a paucity of research and applications related to output measures in that area.

While this issue of *NCL* was being edited, state and local governments were in the process of attempting to deal with budget reductions and demands for improved services. The next decade threatens to impose further budgetary restrictions and demands for accountability upon most libraries. Librarians will find it imperative to state clearly their goals in terms of services and programs to users, to devise ways of measuring progress toward those desired outcomes, and to demonstrate to their funding agencies both the value and effectiveness of their organizations. We hope that this *NCL* issue will impel library managers to think about the assessment portion of this process, and to add performance measures to their tools for rational decision making.

But What Does the Data Mean? Getting From What Happened to Why it Happened

Sharon L. Baker

During the 1960s and early 1970s, the American economy was so favorable that funding for all types of libraries increased. Librarians received most of the resources they needed to implement or maintain services even though they collected few data on the real success of library programs. In the last fifteen years, however, the average cost of running a library has risen faster than its income. Today, funding organizations expect libraries to continue providing quality services while keeping costs down. They also want "proof" that library programs are operating efficiently and effectively.

These changes in the funding climate and the spread of sophisticated evaluation techniques through society in general have led various state and national library associations to promote the use of performance measures in all types of libraries. Some libraries have been slow to adopt these measures,[1] but their use is growing.

The Macroevaluation of Library Services: Learning What Happened

Such performance measures generally emphasize the *macroevaluation* of library services. As Baker and Lancaster (1990) explain in some detail, macroevaluation studies measure the success rate of a system; that is, they describe *how well* it operates. The results of macroevaluation studies can usually be expressed in quantitative terms, such as the percentage of reference questions answered accurately. For example, and as Figure 1 shows, the twelve measures discussed in *Output Measures for Public Libraries*[2] are all macroevaluation measures. Because such measures show the level of performance at which a service is operating at a specific date, they serve as a benchmark. Library directors can use performance data from their own libraries and from comparable libraries to support the argument that more resources are needed to improve program quality. Then, if resources are subsequently added, the library director can compare results with this benchmark to see if the service has improved. Benchmark figures can also be reviewed to determine if the quality or quantity of service is declining. Indeed, many libraries collect such performance data to serve as an early warning signal for trouble spots.[3]

Unfortunately, librarians who collect this type of benchmark performance data still have a major problem. While they know what happened in regard to a given library program, they often do not know *why* a program is or is not successful. That is, the macroevaluation measures collected do not give librarians enough information to make intelligent changes to improve service quality. This may explain Schlachter and Belli's discovery that seventy-eight percent of the California public libraries that collected performance data made no changes based on the findings.[4] Some needed changes may not have been made for quite valid reasons, such as a lack of immediate resources to solve specific problems. But the fact that so many libraries failed to make *any* changes may indicate that collection of this type of macroevaluation-oriented performance data does not, in and of

FIGURE 1.

Macroevaluation Measures Appearing in *Output Measures for Public Libraries* (Van House et al., 1987)

Annual library visits per capita
Registration as a percentage of population
Circulation per capita
In-library materials use per capita
Turnover rate
Title fill rate
Subject and author fill rate
Browsers' fill rate
Document delivery rate
Reference transactions per capita
Reference completion rate
Program attendance per capita

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itself, provide enough useful information to improve services.

The Microevaluation of Library Services: Learning Why it Happened

Diagnostic information which *can* be used for improvement comes from *microevaluation* of library services. Microevaluation investigates *how* a system operates and *why* it operates at a particular level — that is, what makes it work well or badly. The most important element of this diagnosis is identifying reasons for particular failures. For example, while it is nice to know that fifty percent of a library's patrons did not receive complete and accurate answers to their reference questions, improvements cannot really be made unless the causes of the problem are pinpointed. A microevaluation would examine whether the reference librarians failed to verify the users' "real" information needs, used poor strategies to search the catalog or other bibliographic tools for the answers, or were too busy to accompany patrons to the shelves to show them the specific items that could answer their questions. Microevaluation would also look at other reasons for failure, such as collection inadequacy or poor subject access in the card catalog. This type of microevaluation study is of greater practical use to the librarian because it provides guidance about which actions might be taken to improve reference accuracy. That is, a microevaluation study of this nature tells us what the performance measure (the fifty percent accuracy rate) really means.

Microevaluation investigates *how* a system operates and *why* it operates at a particular level . . .

Although most of the performance measures promoted by library associations are examples of *macroevaluation*, librarians can fairly easily expand their data collection efforts to determine how and why these success rates were obtained — that is, to include *microevaluation*. Let's take a simple example.

Output Measures for Public Libraries suggests that one performance measure — title fill rate — be collected using a simple patron questionnaire.[5] Generally, each patron who enters the library during a selected week is given a questionnaire on which to indicate the works being sought and whether or not they are found. The form is turned in as the patron leaves the library. At the end of the week, the total number of titles found by patrons is divided by the total number of titles sought. This gives the library's overall success rate in filling patron requests for specific items.

Evaluators who stop here will know what is happening — that is, what proportion of a patron's needs for specific materials have been met — but they will not have the diagnostic information necessary to increase their fill rates in the future. They must go beyond such macroevaluation studies and determine if the reasons *why* particular titles are unavailable fall into perceivable patterns. For example, are there major collection gaps? Are popular titles owned but in quantities insufficient to meet patron demands? Are purchased titles stalled somewhere in technical processing so patrons still do not have access to them? Are the reshelving procedures so slow that books are sometimes present in the library but unshelved so that patrons cannot find them?

Such a microevaluation study is actually quite easy to perform, if the evaluator simply carries the data collection efforts a bit further. In the above study of fill rate, the evaluator should not stop at simply asking patrons to indicate on a questionnaire whether they found the titles they were seeking. Rather, as each questionnaire is turned in, the evaluator should check the catalog, the shelves, and the circulation area to determine why the patron failed to find desired items. For example, several major problems might inhibit patron access to specific items: acquisitions barriers, circulation interference, patron errors (in using the catalog or in searching for materials in the stacks), or other library errors like misshelving. As Figure 2 shows, each of these problem areas can be broken down even further. In fact, the finer the analysis, the more likely the evaluator is to figure out why books in this library are unavailable for use when patrons want them. Once the evaluator has determined the problems that occur most frequently, library practice can be changed to prevent, or at least decrease, the chances of those problems recurring. For instance, if many titles are unavailable because they are checked out to other patrons, the library can either shorten the length of the loan period for popular titles or can buy more copies of them.

Virtually all the macroevaluation measures that are recommended by library associations (measures of fill rate, reference accuracy, speed in interlibrary loan or document delivery, etc.) can be used as the first step in a microevaluation study. In most libraries, a committee of profes-

FIGURE 2.

List of Reasons for Nonavailability of Titles Developed by the Iowa City (Iowa) Public Library

The Acquisitions Barrier

The library does not own the title.

The library has ordered it, but it has not yet been received.

The library has received the title, but it has not yet been cataloged and processed.

The patron does not know about other options such as requesting that the title be purchased or asking for it to be obtained through interlibrary loan.

Circulation Interference

The item is checked out to another borrower.

The item is checked out to Technical Services to be repaired, re-bound, re-cataloged, or re-labeled.

The item is checked out to "Missing" and has not yet been replaced.

The item is long overdue from another library borrower and no decision has been made about whether to replace it.

Library Error

The item is checked in but is not yet reshelved.

The item is mis-shelved.

The call numbers on the item and in the catalog do not agree.

The library is unaware that the item is missing (e.g., it has been stolen).

The item was not properly checked in; the catalog indicates it is checked out, but it is on the shelf.

The item is currently in use by a staff member but it is not checked out.

User Error

The user cannot find the item in the catalog (e.g., due to incorrect title or author information or incorrect search techniques).

The user finds the bibliographic record in the catalog, but misinterprets the information. For example, he assumes that the bar code or publication date is the call number or he records the call number incompletely or in the wrong number order.

The user locates the title in the catalog and copies the correct call number down, but he cannot find the location. For example, he doesn't understand the significance of certain terms or symbols in the call number; he can't find the location referred to; he makes mistakes in the alphabetical or Dewey order; he doesn't understand the sequence of shelving units.

The user does not ask a staff member for help at the catalog or at the shelf. This could be due to his not being able to find or identify a staff member, to his finding a staff member already occupied with other patrons, or to his fear of asking a staff member for help.

sional librarians can examine any type of raw performance data, isolate those services with inadequate performance levels, list a number of possible reasons why performance might be bad, and develop a "quick and dirty" study to see what is actually causing the problem. For example, if a library discovers that few interlibrary loans are filled within an acceptable period of time (say ten days), the librarians can generate a list of possible causes of the poor performance. These may be related to the characteristics of materials requested (such as the date and the form of publication), the size or training of the interlibrary loan staff, membership in a library network, or factors relating to other libraries (e.g., although materials are requested quickly, some requesting libraries may be slow to fill the orders). A fairly quick evaluation can identify which of these is the most likely reason for poor performance. Library staff can then work to reduce the problem. For example, if two libraries within an interlibrary loan network are found to be very slow in filling material requests, staff can be advised to seek materials from other libraries first.

Some librarians may feel that they lack the necessary expertise to conduct microevaluation studies. And indeed, issues of validity and reliability should be considered to ensure that the performance data is accurate.[6] Validity refers to whether the evaluator is actually measuring what is intended and to whether generalizations can be made from the data collected. Reliability refers to whether the evaluator can expect to obtain the same results if the data is collected at a later date or by a different evaluator.

Aid for librarians who need help with these or other methodological problems is available in several forms. Library schools, library associations, and state library agencies may provide consultation services, recommend consultants who are experts in evaluation, or present workshops on evaluation techniques. Librarians collecting performance data can also read any of several recently published books on the topic, such as *Measurement and Evaluation of Library Services*,[7] *If You Want to Evaluate Your Library . . .*,[8] and *Are We There Yet? Evaluating Library Collections, Reference Services, Programs, and Personnel*.[9] These books discuss some of the finer points of collecting performance data and cover both the macroevaluation and the microevaluation of library services. The books also recommend variations on particular themes (e.g., using separate fill rate studies for each branch of departmental library and for each format of materials owned). The Baker and Lancaster title summarizes findings of past evaluative studies as well.

Summary

Because of funding limitations facing libraries today, librarians are collecting more performance data. Unfortunately, most librarians limit the usefulness of the data by collecting information that focuses almost exclusively on what happened in a given situation. Such data is useful because it establishes a benchmark figure against which future data can be compared. In order to make real improvements in service, however, librarians also need to explore *why* and *how* things happen in libraries. That is, librarians need to determine the causes of particular problems so that effective changes can be made.

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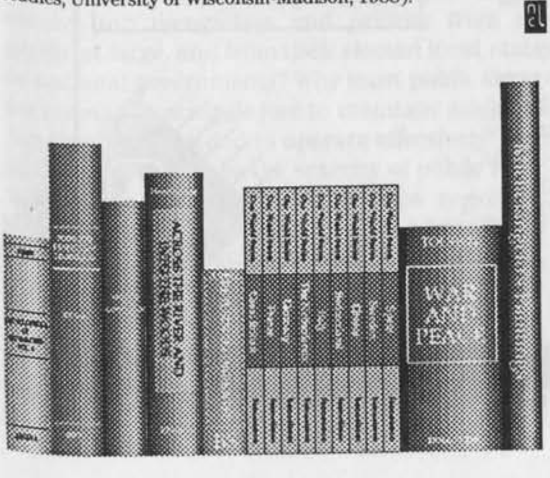

Federal-State Cooperation for Public Library Data

Kitty Smith

The information and related services provided by American public libraries in just about every corner of the country are a national bargain. Compared with what it costs the taxpayer to build, maintain, and operate just a few Stealth bombers or space shuttles, the public library's cost per unit of service is certainly a consumer's "best buy." At the same time, public libraries in the United States make a large contribution to the economic health of the nation. On the whole, they constitute more than a four billion dollar industry, and employ over ninety thousand persons. They spend over a half billion dollars on books and other materials to provide information at no charge. Their number of outlets rivals that of the most prolific fast food franchises.[1]

"If We're So Smart, How Come We're Not Rich?"

Any marketing novice knows that high-quality products that meet customer needs, are packaged to suit the customer, and are offered at an unbeatable price, combined with a distribution system already in place in practically every community, should be in a good position to win the lion's share of their markets. It follows, therefore, that in an age when information and information-related products are needed in every aspect of daily life, libraries might be expected to be at the top of the list of leaders in the information marketplace.

Why is it, then, that public libraries do not receive top recognition and priority from the public at large, and from their elected local, state, or national governments? Why must public libraries constantly struggle just to maintain minimum funding levels needed to operate effectively? Part of the answer may be the scarcity of public information available nationally, or even regionally, about the extent and variety of the benefits of public libraries. Creators of policy, administrators, and citizens must have timely, dependable information if the nation's public libraries are to continue providing superior service. Yet until very recently there has been little awareness about them on the part of government and the public. It would be an oversimplification to blame the problem on the libraries' failure to "get the word out." Public libraries themselves have not had access to the kind of comprehensive national information they need to manage and assess their operations effectively, let alone to create national appreciation of libraries.

The purpose of this article is to provide details on the background, organization, administration, and activities of the Federal-State Cooperative System for Public Library Data (FSCS).[2] This new, nationally coordinated system holds great promise for providing the comparative data needed by libraries and policy makers into the 1990s and the next century.

The Evolution of FSCS

The United States government began collecting information about public libraries more than one hundred years ago. In the 1867 legislation creating the U. S. Office of Education (USOE), Congress described the agency's function and obligation to

> collect such statistics and facts as shall show the condition and progress of education, to diffuse such information as shall aid the people of the United States in the establishment and maintenance of efficient school systems, and otherwise promote the cause of education.

Instinctively, the young USOE identified libraries as an important component in the "cause of education." By 1876, the agency had compiled an extraordinary fund of descriptive and statistical data. This data appeared in the report on public libraries in the United States, just in time for the United States centennial celebration. It was to be another sixty years, however, until a distinct unit for library services was authorized within the USOE. Appropriations for this unit were specifically "for expenses necessary for the Office of Education, including surveys, studies, investigations and reports regarding libraries."

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In 1937, the heart of the Great Depression, the unit started collecting statistics and assessing the condition of the nation's public libraries. Its findings were most discouraging, especially in the rural localities, where libraries and library services ranged from impoverished to nonexistent.[3] In North Carolina, for example, over two-thirds of the population had no access to a public library facility, and existing libraries averaged revenues of only four cents per capita. Statistics like these, however disheartening, became the primary catalyst for passage of the Library Services Act (LSC) of 1956, and the subsequent Library Services and Construction Act (LSCA). Both LSA and LSCA targeted rural and other underserved segments of the population for development of library services.[4] (According to 1988 estimates, one hundred percent of North Carolina's population had some access to services offered by 347 public library outlets. Total federal, state, and local operating receipts averaged about $10.40 per capita.[5])

Almost from the start, these federal grant programs reinforced and intensified the role of the state library agencies. By requiring the individual state libraries to plan and oversee the administration of grants, LSCA provided a model for federal-state communication and cooperation. In addition, the states had a powerful incentive to improve their methods of data collecting. This enabled them to assess the effects of the federal grants program and report to federal authorities. Federal agencies worked with the states to establish and delineate consistent standards and terminology. The major burden of data collection came to rest at the state level, while the USOE library programs office concentrated on the analysis of data from the states. USOE's analyses were used to support federal legislative and executive initiatives.[6]

The mid-1960s were an era of massive social upheaval. Virtually all units of the federal government responded with historic activity. The evolving "new federalism" was reflected in Congress'

. . . the public library's cost per unit of service is certainly a consumer's "best buy."

establishment of the National Center for Education Statistics (NCES) within a reorganized USOE. This legislation institutionalized the compilation, evaluation, and distribution of national education statistics in the federal government. A National Conference on Library Statistics, sponsored by the American Library Association (ALA) and USOE, was held in 1966. The purpose of the conference was to bring interested agencies and persons together to discuss ways of organizing a national system of data collection to satisfy local, state, and national needs for library information. In the same year, ALA published *Library Statistics: A Handbook of Concepts, Definitions, and Terminology.* This publication was a significant improvement in itemizing, categorizing, and defining data for all types of libraries. An eventual outcome of the ALA-NCES association was a 1970 report entitled *Planning for a Nationwide System of Library Statistics.* Two of its recommendations were of particular significance for state-federal efforts: (1) it was essential for NCES and the states to share responsibility for library statistics in a "highly defined, coordinated, and regularized" program; and (2) such shared responsibility meant that training programs at the state and local levels were imperative "for general understanding, accuracy of returns, and compliance."[7]

These recommendations set the stage for a most ambitious project during the 1970s. The Library General Information Survey (LIBGIS) was conceived as a national data program that would coordinate local, state and federal agency efforts into a comprehensive reporting system. Nevertheless, in spite of high initial hopes for its success, LIBGIS never fully reached maturity as a national data system. The project lost impetus in the political and technological mutations of the late 1970s. In the early 1980s shifts in federal spending priorities brought LIBGIS to a halt.[8]

At mid-decade there was still no coordinated, comprehensive national program of public library statistics, although prospects for such a system had not been totally extinguished. State library agencies were still collecting statistical information from and for the libraries in their respective states. Without any real national coordination, however, there were some serious challenges ahead. In an effort to explore contemporary practices in public library data collection, the ALA Office for Research investigated the various instruments used by states for data collection and reporting. Each state library's forms for public library data collection were requested, along with copies of each annual statistical report. The forms and reports were analyzed to determine commonality of data items for possible national and regional comparison. The conclusions of this research were that there were some rather disturbing inconsistencies from state to state. For example, the states were using so many diverse ways to count collection resources of public libraries that fifty-eight percent of these data items were unique to only one state. In the areas of circulation and registration, seventy-three percent of the data items were unique to one state. Results in other areas such as interlibrary loan, income, expenditures, and reference were no better.[9]

Rather than focus negatively on these findings, however, the Office for Research initiated a team effort with the Chief Officers of State Library Agencies (COSLA) and the Public Library Association (PLA) to identify a core common set of data items that could be collected in the same way, using the same terminology in each state.

In 1985, the Department of Education's Library Programs Office and the NCES co-sponsored a very productive pilot project based on the common data elements identified by the ALA-PLA-COSLA group. Fifteen states participated in the landmark data collection venture.[10] Then, in 1988, Congress passed the Elementary and Secondary School Improvement Amendments of 1988 (P.L. 100-297), appropriating funding that infused new life into NCES's public library data activities. Federal law, for the first time, specifically charged NCES with responsibility for collecting data on libraries. Statistics on all types of libraries were to be included among the ongoing activities of the center. The law also mandated representation of the National Commission on Libraries and Information Science (NCLIS) on NCES's Advisory Council on Education Statistics.This council's responsibility is to set standards, ensuring "technically sound data, not subject to political influence."[11]

Early in 1988, NCES and NCLIS set up a Task Force to develop an Action Plan for the Federal-State Cooperative System for Public Library Data, as dictated by the School Improvement Amendments. National and state organizations (i.e., NCES and the Library Programs Office of the Department of Education, NCLIS, ALA, the Public Library Association, the Library Administration and Management Association (LAMA), and COSLA) appointed representatives who were interested in and committed to accurate and reliable annual state and national data. In summer, 1988, NCES requested and obtained the cooperation of COSLA in appointing a state data coordinator for each of the fifty States and the District of Columbia.

The *Action Plan*, as developed by the Task Force, includes a universe file (or name authority file) of all public libraries in the country. In addition it specifies system operations, the data items to be collected, definitions, analyses, and publications to be generated, as well as formats for statistical tables. Currently there are forty-one data items in the system covering basic statistics for: the number of service outlets, number of employees, library income, operating expenditures, size of collections, service hours, services, circulation, and interlibrary loans. Items will be presented by state and by population of library service area.

The *Action Plan* divides labor among local and state libraries and NCES. The local public libraries are responsible for collecting local library information and relaying it to their respective state agencies (usually as part of the states' normal data-gathering practices). The states, in turn, provide training for local libraries from whom they gather statistics, and relay the information to NCES in computer-readable format. Finally, NCES compiles the data submitted by the states for publication and dissemination. NCES is also responsible for training and continuing education for participating State Data Coordinators. At this writing all fifty states and the District of Columbia have named a coordinator. National training workshops for Coordinators were held in Annapolis, Maryland, in December 1988, and in Phoenix, Arizona, in December 1989.

Accurate, reliable data will help individual libraries report to their governing bodies and the public in more meaningful ways than ever before possible.

The North Carolina State Library was among the first group of nineteen state library agencies to submit FSCS data (in Lotus 1-2-3 format) to NCES in July 1988. The state's participation was made possible through cooperation between the State Library's Public Library Development Section and the Statistics and Measures Committee, Public Library Section of the North Carolina Library Association. Their work resulted in a revision of the annual data collection forms to include the data elements prescribed by FSCS, and revision of the annual statistical report to incorporate concepts such as "output" measures and comparisons of libraries by population of service areas.

In 1989, forty-four states and the District of Columbia participated. In July 1989, NCES, working with the Task Force's Technical Committee, provided each participating state with a copy of "DECTOP" (for "Data Entry Conversion; Table

Output Program"). This new program, developed for use on a personal computer, affords quick and dependable input of data by state personnel and processing by NCES. DECTOP lets states extract the FSCS-required data items from their existing administrative files, input them through a choice of common application software, and edit for errors automatically. When the data has been corrected the states can produce the same tables as NCES for review before submission. The state then uses DECTOP to prepare a floppy disk, which is sent to NCES.

The *Action Plan* also prescribes the development of a universe or authority file identifying public libraries in each state. For this purpose, the Technical Committee and NCES will be supplying the state agencies with "PLUS" (Public Library Universe System), a customized personal computer application similar to DECTOP. Initial use of PLUS is planned for 1990.

With a permanent, coordinated system of public library data collection in place, libraries can make their value known to those they serve and those who provide resources to them.

"Where's the Beef?"

What are the payoffs expected from total participation of the states in FSCS?

1. Public libraries can use the uniform statistics to evaluate their own performance, compare themselves with libraries of similar profile, and set priorities for the future. Accurate, reliable data will help individual libraries report to their governing bodies and the public in more meaningful ways than ever before possible.

2. State and federal library agencies need good data to plan legislation and budgets that are cost-effective and make sense in terms of public need. Statistics are the backbone of the evaluation of grant and service programs.

3. Private sector firms that do business with libraries need dependable statistics to generate useful business and marketing plans.

4. Library statistics are essential to the work of educators, researchers, and media personnel for study and reporting.

5. Library professional associations at the local, state, regional, and national levels count on library data to develop standards, and present positions on government programs affecting library services.[12]

6. Finally, statistics will be integral to the successful outcome of the second White House Conference on Library and Information Services (WHCLIS), which has as its goal the development of recommendations for the further improvement of the library and information services of the nation. William G. Asp, Chair of the White House Conference Preliminary Design Group, recently described WHCLIS in terms which might be equally applicable to the Federal-State Cooperative System:

> "[It] is not an event; it is a process. With library and information services an integral part of a democratic society, the process involves people from every state . . . to discuss issues of library and information services at all levels . . . . It is a dynamic process that identifies user needs as a basis for realistic planning as we approach the 21st century."[13]

With a permanent, coordinated system of public library data collection in place, libraries can make their value known to those they serve and those who provide resources to them. They can answer important questions heretofore unasked or unanswerable: Have our state and federal library programs met the goals they were intended for? Are we getting a fair return in benefits for our tax dollars? What is the quality of service? Is it truly equal and available to all, especially children, the elderly, the poor and others not in the mainstream? Are our libraries really, as Librarian of Congress James Billington put it, "the golden entry point, the point of assurance that there will be democracy in the future"?[14]

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Use of Staff Output Measures in the Wake County Public Library System

Val Lovett

As daily suppliers of statistics to the public, librarians might be assumed to be comfortable using statistical measurement as a tool to study staff work production, to evaluate staff effectiveness, to allocate staff resources, and to establish work standards. Hah! The profession is so ambivalent about statistical measurement of staff output that even comparative research studies are enshrouded with "Yes, buts." As for statistical measurement in one's own bailiwick, anxiety here is the most intense among administrators, managers, and staff alike.

I spent a day at the UNC-CH School of Information and Library Science trying to find articles or research about how output measures, work statistics, or any other measurements of staff output are used to construct budgets, allocate resources, plan new services, design new buildings, or request additional staff. I found articles about accuracy in reference work that once again sent shivers down my spine; I found information on how to construct a budget which avoided any specifics as to methods used to determine staff levels; I read some cryptic articles on what types of data are being collected, mostly in technical services departments, but I did not find any articles on the application of work statistics to the allocation of library resources or on the construction of budget requests. I was amazed.

Now I *know* everyone is looking at everyone else's data. Just last March, if one paused in one's daily routine, one could hear the sound of all the public library directors in this state ripping open the envelope that contained the North Carolina Division of State Library's annual compilation of public library statistics. One could hear the pages being rifled, the sighs of relief and the groans of disappointment, as each director compared his or her library to the closest rivals. One can imagine the acceptance of the good, the rejection of the bad, and the rationalization of the ugly.

Managers and administrators routinely use statistics to make decisions about library operations, but they do not use them openly nor do they use them enough. There is not a healthy balance between objective measurement and subjective evaluation. Although we are doing fine with the subjective assessments, we are too wishy-washy about the intelligent use of staff work production data in allocating resources. We talk about political realities, circumstances beyond one's control, and other stock phrases to wrap ourselves and our staffs in the cotton wool of unreality that statistics do not count. Then why are we counting?

The problem begins at home. Administrators should decide what work production statistics will be collected, how they will be evaluated, and how they will be used to make decisions. The data measurements chosen should relate directly to the library's mission statement, long range planning goals, and the current year's plan for action. These selections should be discussed thoroughly with the library staff, who are not only the primary collectors of the data, but usually the most resentful and suspicious of its use. No one likes to see results of his or her work reduced to numbers, especially when one does not know how those numbers will be used and may suspect they will be used against oneself and the status quo.

The manager must overcome this understandable staff resistance by using staff input to design and refine collection instruments. As the advocate for the use of this data, a manager must convince the staff of its responsibility for the validity of the statistics through the staff's reliability in the collection of the information. In my experience, the more reliant we are upon human beings to count ephemeral data, the more unreliable it is. For example, whether one uses a manual or an automated circulation system, there is something tangible to be counted. Contrasted with this, reference question tabulation is entirely dependent upon the accuracy of the staff in recording the data regardless of the method used in collecting it. When I talk with reference librarians about improving enumeration, they express their frustration in trying to keep an accurate count when their focus is on service to the patron. To them the patron services are the most important and I

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agree with that emphasis. The viewpoint often expressed by reference staff members is that if there are any doubts more staff is needed, then "they" ought to come to the library and work a few days.

It is vital to explain and discuss with the staff the role that data analysis has in decision making by library administration so that one can lower their frustration level. One can demonstrate the effect good data collection can have on the library's services. Also, the entire staff should analyze the data so that further refinement of the instrument and data evaluation is done by line and management staffs. This will build credibility for the process and help eliminate some of the mystique about use of the results.

Having done this, each year before data collection begins, the library administration projects the performance levels it believes the system should achieve in circulations per capita, turnover rate of the collection, books processed per hour, reference questions answered, story hour attendance, or percentage of the population registered as library patrons. Since data collection is an ongoing process, the administration is setting targets to reach for the upcoming year based upon both past performance and the annual plan for the library system. As mentioned earlier, the chosen measurements should be an outgrowth of the mission statement and the goals of the library system. Then, data collection and evaluation become a method for assessing success in reaching the objectives set forth in the annual plan for the library system. Establishing these target levels for service achievement is similar to the private sector's setting goals for manufacturing and sales.

. . . the more reliant we are upon human beings to count ephemeral data, the more unreliable it is.

Now the administrator and the manager can discuss in detail the productivity targets for the branch or the department. They can work together from the goals established for the entire organization to the particular objectives set for the work unit. In addressing increased productivity, there is every reason to discuss increasing the work product by specific percentages or numbers, for example, increasing the circulation of juvenile non-fiction by thirty percent during the fiscal year. The administrator and manager can talk about the activities and resources needed to accomplish this objective. A specific discussion is more productive than a vaguely stated direction such as "I want you to work on increasing circulation of the juvenile non-fiction materials." Working as a team, they can develop the necessary activities to achieve their objectives. This process can be used in all departments of the library, and it addresses the expected output measures for the individual work unit.

Staff output measures also can be used to establish work production standards for individuals as well as the entire unit. As managers, we must be fair to staff in expecting the same standard of work from all employees in the same jobs. The standard should be achievable, but also high in quality as well as quantity. Low or non-existent work production standards allow everyone to achieve a level of mediocrity. In my experience this has occurred most frequently in the clerical areas of the library profession such as typing catalog cards, editing records, filing cards, or shelving books.

Librarians become very defensive about establishing production standards for reference work, cataloging, or children's programming (i.e. "professional work"). I believe we have avoided developing performance standards for professional and para-professional positions for several reasons. The work performance standard in these areas is more difficult to establish, but not impossible. I think we resist turning our work into a statistical measure because we feel it demeans and oversimplifies what we do. Well, that argument is also applicable to those jobs in our libraries for which we are comfortable in using work standards.

All this discussion is the easy part. It is the prelude. Now one can begin to use the subjective impressions and empirical data together to understand the dynamics of the library system. When the empirical information is contrasted with the subjective, even though many subjective deductions are valid, there will be some surprises. The data will assist one in identifying specific differences among similar situations, the deviations from the mean and/or the median. Investigating these highs and lows can bring valuable insights, with resulting improvements in service. However, we must design those sophisticated means of measuring and quantifying that work because of the important information it can provide for library management decisions.

Support Services Case Study

In 1981, the cataloging and processing backlog at Wake County Public Libraries was approximately six weeks from receipt of the books, with some problem titles lingering on the shelves for as many as six months. Many titles, especially popular ones, were not received at library branches for months after they were available in bookstores. The branch staff bore the brunt of the public ire so that the working relationship between public services and support services was not genial. At that time the Support Services Division was processing approximately sixty thousand books per year. The Order Section used the Libris online ordering and accounting system. The Cataloging Section used OCLC/SOLINET. The card catalog had been closed on April 1, 1979, so the public catalog was published in microfilm format.

In late 1981, the library director set goals for the Support Services Division. He instructed the two managers of the division to reduce the turnaround time from the receipt of the books to the shipping of the books to the library branches to one week. The only exception was that high demand materials were to be ready to leave the building in one day. In addition, books were to be ordered and selected so they appeared on library bookshelves at the same time as they did in commercial bookstores.

The members of the Support Services Division achieved those goals within the year. They did this by meticulously flow charting each step of every operation. Then every step in the entire process was examined rigorously for its relevance and its efficiency. What happened in the Processing Unit is a good example of production standards helping to improve productivity.

The work done by the library processors at that time was the physical preparation of the book for the library shelves. Jacketing, pocketing and carding, accessioning, property stamping, and spine labeling represented the majority of the work. Book trucks were always conspicously ganged up in this area. There were no work production standards; everyone simply came to work and processed books. All the staff felt oppressed by the work that was piled up behind them.

For three months statistics were kept by individual processors. The work productivity achieved varied widely. There were several meetings of that staff with the head of cataloging who was the manager responsible for the unit. The staff set a work standard of three thousand books per month per staff member. After six months the individual work statistics were reviewed. The standard was found to be too high and was revised to twenty five hundred books per month per processor. This standard is in use today.

Today, only in the first rush of the fiscal year ordering do the processors have a few trucks backed up. However, they clear them very quickly. They are processing approximately one hundred fifty thousand books per year with only one additional staff person. When there is not enough work to do, they assist other support services units and library branches. During the past fiscal year, they have been instrumental in assisting smaller branches in linking collections to our CLSI system. During the upcoming year they will have linking duties for new books assigned to the unit. This change will necessitate revision of the work standards by that staff, the supervisor, and the manager.

This example illustrates how all the members of the Support Services Division turned themselves into customer-oriented, public services employees. Since 1981, the workload has risen from sixty thousand to one hundred fifty thousand new books representing approximately 11,000 titles. During these years, this staff also managed to convert retrospectively all title holding records to machine-readable format and install the CLSI circulation and public access catalog modules. The cataloging standards continued to be AACR2/MARC format, there were no compromises in the finished physical product, books are being received at the same time as the bookstores put them on their shelves, and the division has transferred three positions to public services.

. . . we resist turning our work into a statistical measure because we feel it demeans and oversimplifies what we do.

The results have been improved service delivery to customers at a lower cost per unit of production, production expansion which kept pace with a growing book budget while also being flexible enough to do retrospective conversion, and library automation. The production standards helped improve the work of employees, helped eliminate non-productive employees, and through merit raises rewarded excellent employees.

It is also significant that the director did not tell managers and staff how to achieve the goals that he set. Since they had the expertise to make the choices, staff members made those decisions. The importance for administration is that the managers and staff made and adopted the changes rather than having them imposed upon them from outside the division. This is one way that staff output measures can improve productivity and service delivery without using additional dollars.

Ideally, if we understand the level of work an employee can achieve, there are many positive uses for that measure. Take, for example, a reference librarian. If we establish the number of reference questions which can reasonably be answered in an hour, we can extrapolate potential work load for the entire staff. Then we can construct schedules to meet demand from patrons. We can pinpoint when demand outstrips human resources and affects the quality of service the staff can deliver. We can identify those hours in the week when that critical point is reached. When the demand for service has outstripped available resources, we have the information to support additional personnel requests with the budget office. Those personnel requests can be more accurate than in the past. For example, one might request two half-time positions to target overloaded nights and weekends, rather than a full-time position working some hours where demand is less critical.

Reference Case Study

The statistics from Table 1 will be used to discuss several points about staff output measures. I must confess that Wake County Public Libraries does not have a performance standard for the number of reference questions per hour for a staff member. Therefore, we have to use the information available to us. [Note: I am not aware of any existing standard in use for reference questions, although I am interested in the possibility of developing one.]

During the preparation of the library system's personnel request for the FY 1991 budget, there were a number of requests submitted by library branches for additional personnel to maintain existing levels of service. There was a subjective opinion that Branch C should have the first priority position in that request because it is so busy. The data reveals that although it does field more questions per hour than any other branch, there is a relatively comfortable level of average demand on each staff member. The same cannot be said of Branch B. Because these statistics do not include directional questions, instructions on the use of equipment or reference tools, making change, or other requests that take time, we knew empirically and subjectively that Branch B should have the priority position in new staff requests.

Budget analysts do not conceptualize "service" well at all. A statement that reference service at the branch was deteriorating because the demand for service is higher than the staff can handle does not mean much to my budget analyst. Even if I had stated that at peak hours the staff might as well stand behind the desk and randomly throw books at the patrons, while I might have made a point, I have not proven it. I must translate service delivery into the language of the budget administrator, or I will be on the losing end in the struggle for a greater share of the budget dollar. Therefore, if I can translate service into a statistical measure and relate it to a work standard (even if it is more than a little subjective), then the budget analyst and I can examine the staffing issue based upon the reasonably achievable work in a staff hour. A variant of Table 1 was used in the budget document for FY 1991.

In FY 1991, Wake County added more than two hundred new staff positions, most of them related to capital projects, such as the new Public Safety Center which was coming online. There were only ten positions funded in the County to deal with growth in existing services. One of those positions was a new professional position for Branch B. This is an example of how staff output measures can add more dollar resources.

Another point to be made is that Branch B helped itself by positioning itself. At the end of the previous fiscal year the branch manager told me he felt the staff was seriously undercounting reference questions. We talked about the importance that data had on budget requests. He included activities to improve data collection in his work

TABLE 1.

Adult Services Staff Output Measures Estimates for Reference Questions in Selected Wake County Public Library Branches, FY 1990

	Branch A	Branch B	Branch C	Branch D
Staff Hours/Year	16,000	5,000	16,000	10,000
Hours Open/Year	3,600	3,400	3,600	3,600
Ref. Quest./Year	49,672	40,091	60,160	31,727
Ref. Quest./Staff Hr.	3.10	8.01	3.76	3.20
Ref. Quest./Hr. Open	13.8	11.8	16.7	8.8

plan. As a result, the Adult Services Department recorded fifteen thousand additional questions as answered.

In looking at the data in Table 1, several other staff members have the subjective reaction that we are either undercounting or using an invalid sampling technique. A conversation among the director, the Adult Services Coordinator, and myself revealed that the sampling techniques had been developed primarily to provide collection development information for Adult Services. The director and I, however, primarily use them for measurement of work load and service delivery, budget work, and future planning for staff size. We agree that we need to do more testing and refinement of our sampling instrument and will be working on that in the upcoming year.

Allocation/Reallocation of Resources

The toughest part of any administrator's job is the allocation or reallocation of resources. Output measures assist in these decisions. Until three years ago the Wake County Public Libraries System only divided its materials budget by the categories of adult, children's, continuations, and periodicals. Branches purchased what they needed. In FY 1989, at the request of branch heads, the budget was subdivided into individual branch budgets for adult materials. Since then this has been done for children's materials. Because we believe that resources should flow to the areas of highest use, the branch managers in the first year advocated a strict appropriation of monies based on circulation. With experience, however, the appropriation has become less absolute, as we also must acknowledge that there is a floor below which a branch budget cannot fall without totally crippling service. In my opinion, a viable public library branch must have a minimum materials budget of $15,000. So, we combine both objective measures and subjective knowledge in establishing branch budgets.

Just as the manager of Branch B positioned her library to receive additional personnel by increasing the accuracy of its data collection, a branch head can affect the amount of additional monies allocated beyond its budget floor by purchasing materials which will circulate well and by keeping the collection weeded so that the turnover rate will not be affected by dead wood. Wake County has a tiered library system with no main library. Regional branches located geographically throughout the county in population centers provide additional resources for smaller popular lending libraries. Therefore, smaller libraries which have spent monies on books for which they had one or two potential readers instead of borrowing the title from a regional branch will not have the same service return as the smaller library which concentrates on purchasing popular reading while borrowing more eclectic items from the regional libraries. Appropriate selection can raise the percentage of the gross circulation the branch contributes to the system. Circulation goes up, patrons receive more service; patrons receive more service relative to other branches, the branch receives more discretionary money for books. This outcome reflects the effect that staff can have in bringing more resoures to their area of responsibility. By increasing the level of service delivered relative to the system, reallocation of resources, in this case book monies, brings more dollars to that service point. The book circulation output measure can be used as one of the assessment factors in evaluating the branch manager's selection skills.

Conclusion

When an administrator uses statistical measures to make decisions, there will be unhappy campers. For better or for worse, each manager or staff member perceives his or her situation as unique, outside the statistical parameters, and having an incredible number of extenuating circumstances — which he or she will repeatedly share with you. In a profession where we give very personalized, customized service to individuals, it is difficult to accept that all those individualized units of service do add up to produce bell curves, means, medians, standard deviations, and chi squares. It seems inhuman that it comes down to that. Perhaps that is why we have this dichotomy within ourselves that statistics apply to everyone else, but "I need to explain why my situation is different, so the statistics don't really count."

I advocate a team approach in developing quantitative measurements for a library system. It helps everyone understand that statistics are more than numbers. If collected properly, they can create a vivid picture of the effort a staff makes in serving its community. They can be persuasive means of securing additional financial support. Together, with subjective observations, they can assist us in making better decisions about resource allocations. Staff will perceive decisions made by managers as more rational and more fair. As with Branch B, perhaps they will use work performance measures to explain why "my situation is different" and why "I do need the additional resources requested."

Public Library Evaluation: A Case Study

James J. Govern

To evaluate the relative strengths of public libraries, it is crucial that individual library systems evaluate themselves. Libraries unwilling to evaluate programs, services and personnel — and to make improvements based on those findings— will eventually be forced to do so because of the need for accountability and the struggle for scarce public dollars.

This article describes two approaches that public libraries can use to evaluate their programs and services: (1) the Childers and Van House multiple constituencies model and (2) traditional output measures.

The Multiple Constituency Model of Evaluation

In an article in the October 1, 1989, issue of *Library Journal*, Thomas Childers and Nancy A. Van House list four approaches to evaluating effectiveness within organizations: the goal model as exemplified by output measures; the process model based on internal organizational health; the open systems model, which measures an ability to attract resources; and the multiple constituencies model, defined as the ability to meet needs and expectations of certain groups.[1] In their study, Childers and Van House explore the multiple constituencies model. The authors identify seven groups to which public libraries are accountable: trustees, community leaders, library administration, library staff, patrons, friends, and government officials. They consider these groups to be "influential, directly or indirectly, in organization-level decisions."[2]

The authors identify sixty-one key indicators that typically describe what public libraries either do or have. Their study shows that six of these sixty-one indicators were reported in the top nine responses for all constituent groups. Statistically, the six most important indicators of library effectiveness as revealed by this study are: staff helpfulness, services suited to the community, range of materials, range of services, convenience of hours, and materials quality. It is interesting that this study discovered that size of library was not a determinant in choosing what were viewed as important "indicators of effectiveness." The seven constituent groups of small, medium, and large libraries all viewed the same indicators as being important to a library's effectiveness.

In a recent survey of library constituent groups (staff, trustees, county administration,

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Stanly County Public Library
1990
[Trustee] Evaluation of Library Service Survey Form

Listed below are the 6 leading indicators of library service as reported in a recent national survey of public library trustees, community leaders, library administration, staff, patrons, friends and government officials. The groups selected these indicators from a list of sixty-one "things" that libraries typically do. Please rate the effectiveness of our library on these indicators.

	Not Effective				Very Effective
A. Staff Helpfulness	1	2	3	4	5
B. Services Suited to the Community	1	2	3	4	5
C. Range of Materials	1	2	3	4	5
D. Range of Services	1	2	3	4	5
E. Convenience of Hours	1	2	3	4	5
F. Materials Quality	1	2	3	4	5

Comments or Suggestions ______________________________

____

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TABLE 1.

Effectiveness of Library Services

Constituent Groups:	Staff Helpfulness	Services Suited to Community	Materials Quality	Range of Materials	Range of Services	Convenience of Hours	Averages
Patrons (n = 39)	4.80	4.50	4.50	4.20	4.50	4.40	4.48
Government Officials (n = 4)	4.50	4.50	4.00	4.00	4.00	4.25	4.21
Trustees (n = 6)	4.83	4.00	4.16	4.00	3.66	4.00	4.11
Staff (n = 18)	4.55	4.27	3.94	4.00	3.77	3.38	3.98
Library Administration (n = 1)	4.00	4.00	4.00	4.00	4.00	3.00	3.83
Community Leaders (n = 17)	4.29	3.93	3.82	3.52	3.64	2.94	3.69
Group Averages	4.50	4.20	4.07	3.95	3.93	3.66	4.05

library administration, patrons and community leaders), the Stanly County Public Library attempted to apply the methodology of this national study to discover the perceived level of effectiveness of our public library within the six areas. (The following is a copy of the survey form; Table 1 highlights the results of those surveys.)

Interpreting the Results of Constituency Surveys

The results shown in Table 1 indicate that library patrons gave the library the highest average effectiveness rating among all groups surveyed. The lowest average effectiveness rating was turned in by community leaders. Other constituent groups' effectiveness ratings fell somewhere between those two groups. The indicator given the lowest effectiveness rating on any of the six individual areas was "convenience of hours," as perceived by those within the community leaders group. The highest effectiveness rating was given to "staff helpfulness," by the library's board of trustees. On average, the lowest rated area among all areas for all groups was "convenience of hours," and the highest effectiveness rating among all groups for all areas was "staff helpfulness."

This survey has demonstrated in a concrete way for me some things that, as library director, I have assumed for some time: the library staff is by and large viewed as being helpful, and public service hours are not as convenient as they need to be. What I did find surprising from these effectiveness scores was that patrons gave the library the highest rating and that community leaders gave the library the lowest rating.

It should be stressed that the ratings are based on individuals' perceptions of how the library behaves or operates. This survey did not request explanations of the responses from those providing the ratings. We have been able to ascertain various group impressions of library service areas, yet there was no specific information provided to allow us to understand or analyze why those individuals responded the way they did. I liken this type of library evaluation to public opinion polling with its strengths and weaknesses. Further implementations of studies of this type might be expanded to require comments as well as the numeric rating for each of the six areas. However, within these six areas, an understanding of how your library is perceived in the community is very useful information when considering goals, objectives, and setting priorities for your library.

Output Measures

Another method that the small public library can use to measure effectiveness is output measures as developed by the Public Library Association.[3] These evaluation tools were developed so public libraries could measure the results or outcomes as opposed to input of their services. This method of evaluation allows libraries to compare their performance over time, to compare themselves with similar libraries, and to monitor progress on their missions and objectives. Another benefit of output measures is the ability to describe to outsiders and staff alike the library's performance in specific areas. Historically, public libraries reported input such as budget dollars per capita or book budget dollars per capita. Output measures is a way to measure performance.

The Stanly County Public Library staff has surveyed library users each fall for the past three years to determine how we were doing. Our library chose to study the following five measures: title fill rate (proportion of the titles sought that were found); author/subject fill rate (proportion of the authors/subjects sought that were found); browsing fill rate (proportion of the time that browsers found something); reference completion rate (proportion of reference questions that were completed the day of the request); and the document delivery rate (the length of time that patrons must wait for requested materials).

Table 2 shows the results of those surveying periods within those areas. The margin of error is based on the usable sample size.

The reference completion and browsing fill rates show no especially significant statistical differences between the survey periods. The title fill rate, however, has decreased from seventy-one percent (or a range of sixty-eight percent to seventy-four percent) in 1987 to sixty-four percent (or a range of sixty percent to sixty-eight percent) in the 1989 survey. Over the same time the subject/author fill rate has increased from seventy-four percent (or a range of seventy percent to seventy-eight percent) to eighty-one percent (or a range of seventy-seven percent to eighty-five percent). The movement in these fill rates occurred during a time of little change in circulation per capita and collection turnover, two factors which have the potential to affect directly those measures. That is to say, the library and its collection were essentially as busy in 1987 as in 1989.

What could be the possible explanation of the counter movements in these two measures? A collection evaluation study during fiscal year 1988-89 pinpointed several high-demand areas within the adult nonfiction collection which accounted disproportionately for a small part of that collection. For example, the 610s accounted for nine percent of the adult nonfiction circulation during the collection evaluation period, yet that area makes up only five percent of the adult nonfiction collection. We made changes in the book budget beginning with the 1989-90 fiscal year to target those areas where demand and holdings were not in line. This change is one possible explanation for the increase in the subject/author fill rate. Within those areas of high demand, patrons began to see more of a selection.

Analysis of the decrease in the title fill rate over the three survey periods is more problematic. Our title fill rate has decreased during a period of improvement in the document delivery figures and no significant increase in the level of reserve activity. That is, patrons are waiting less time for requested materials, yet the proportion of the titles sought compared with titles found is decreasing. I do not have a plausible explanation for this occurrence. One would think that, if a fill rate (author/subject or title fill rate) showed a decline, one's reserve requests might increase and document delivery would slow down. This scenario has not been our experience in Stanly County.

One of the most significant bits of information gained from this round of surveying is to be found in the document delivery rate; that is, how long someone has to wait for requested materials (reserves). The Stanly County Public Library has demonstrated an improved ability to turn reserves around more quickly. We delivered forty-eight percent of requested titles within fifteen days of the initial request date during 1989 as opposed to only twenty-nine percent within fifteen days during 1988's survey period.

Because of the poor showing on the document delivery rate in prior years, the library made a change in handling bestsellers and reserves. We decided that we simply were not purchasing enough copies of high-demand items. By buying more copies, as well as adding non-reservable copies of bestsellers, we were able to improve the delivery rate in 1989 over the previous year. These changes, in addition to a closer monitoring of our reserve situation, enhanced our effectiveness in this area. Reserve monitoring was accomplished by having a staff member track the amount of time materials were on reserve using the database component of Appleworks on an Apple II-e. Keeping this file up-to-date gave us a handy way to judge quickly the demand for specific titles, as

TABLE 2.

Stanly County Public Library
Output Measures Results:
A Comparison of 1987, 1988 & 1989 Surveys

	1987	1988	1989
Browsers' Fill Rate	94% (± 2%)	95% (± 2%)	96% (± 2%)
Subject/Author Fill Rate	74% (± 4%)	77% (± 4%)	81% (± 4%)
Title Fill Rate	71% (± 3%)	69% (± 4%)	64% (± 4%)
Reference Completion Rate	85% (± 2%)	93% (± 2%)	90% (± 2%)
% of Requests Filled:			
within 7 days	N/A	18%	32%
8 to 14 days	N/A	11%	16%
15 to 30 days	N/A	24%	16%
more than 30 days	N/A	45%	34%

well as very immediately showing those items on reserve for extended periods.

We also analyzed the results of our output measures by comparing (see Table 3) averages for selected measures[4] with the national averages for libraries serving populations between twenty-five thousand and fifty thousand[5] as reported in 1988 and 1989 by the Public Library Association. The table is a listing of those comparisons.

TABLE 3.

Comparison of Output Measures

	SCPL Average	National Average
Browsers' Fill Rate	95%	91%
Reference Completion Rate	89%	87%
Subject/Author Fill Rate	77%	78%
Title Fill Rate	68%	71%
% of Requests Filled:		
in 7 days	25%	27%
in 30 days	58%	71%

The figures in Table 3 illustrate the averages for three years of surveying (1987, 1988 and 1989) for the Stanly County Public Library in these selected measures, compared with the averages from two years of surveying (1987 and 1988) within libraries serving populations between twenty-five thousand and fifty thousand. It is noteworthy that our results on the fill rate measures are nearly the same as those averages for similar-sized libraries participating in PLA's reporting for 1987 and 1988. Typically these libraries were busier than ours in the circulation per capita and collection turnover areas. This fact demonstrates for us that our efforts with collections, services, procedures, and so forth, that affect these output measures have been as successful as the efforts of libraries serving populations of similar size.

The only marked difference is in the document delivery rate where the Stanly County Public Library did not have as high a fill rate as comparable libraries. On average, seventy-one percent of the requested materials were filled within thirty days in those libraries, whereas our fill rate within that time frame was only fifty-eight percent. These clues provided us with the information that led to changes in our reserve procedures. It will be interesting to see if those changes in procedure will continue to raise that percentage.

Using output measures and surveying library constituent groups to discover their perception of library effectiveness are two constructive ways to begin evaluation of services and programs. The results of these activities have given the Stanly County Public Library useful information in making decisions ranging from the allocation of the book budget to determination of the hours of operation. Additionally, positive comments relative to staff helpfulness are always welcome. As evaluation techniques become more refined and easier to use, and as they become required by funding authorities, they will become more and more a part of the public library's normal planning cycle. Public libraries willing to begin evaluating now will be ahead of the game in years to come.

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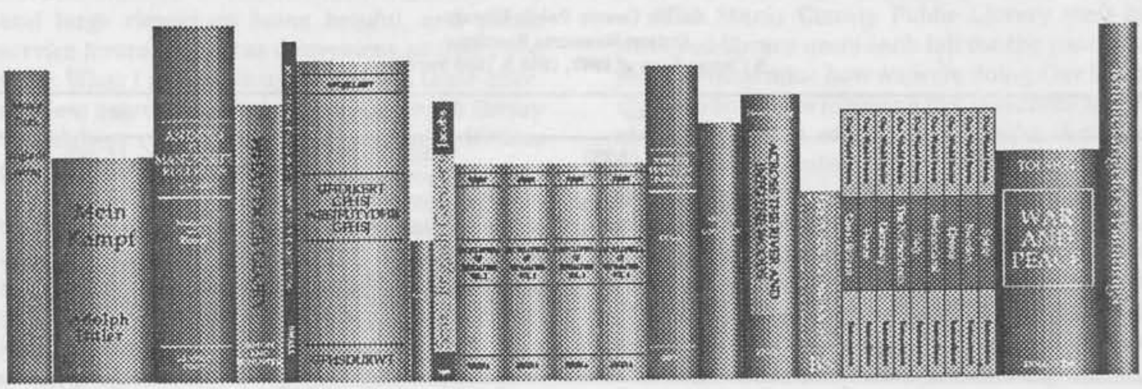

Quantity is *Not* Necessarily Quality: A Challenge to Librarians To Develop Meaningful Standards of Performance for Library Reference Services

Patsy J. Hansel

The idea of performance standards presumes that there is a consensus in the library profession about what good performance is. However, the profession has been hesitant to evaluate reference service qualitatively. We are constantly evaluating reference service quantitatively, as if our reference statistics really mean something, while in just about any library you choose, the staff will freely admit that their reference statistics are inaccurate. And even if your library is one of those where staff really do keep track of every question they get, what does that mean?

Most administrators seem to adhere to the simplistic view that the more questions you answer, the better you're doing. This sort of reasoning is rampant in all areas of library administration. We cling to the belief that quality *is* quantity. This assumption certainly makes evaluation simple: as long as the numbers are increasing, the library must be doing a good job. This belief is based on another premise of library administration — that funders respond to simplistic notions (the bigger the numbers, the better the library's doing), and that it isn't worth the trouble to try to explain more complicated rationales to them. This is probably true, but it doesn't excuse library administrators for basing their internal decisions on such simplistic notions.

If a reference staff answers a large number of questions, that could mean simply that the library is so incomprehensibly organized that users cannot find anything on their own. If such a library is reorganized, the *number of reference questions answered could actually decrease*, while the users of the library receive better service, being able to find things more quickly for themselves.

Perhaps a less sophisticated group of users asks more questions in the library — perhaps they ask fewer, because they are intimidated. Perhaps the libraries that get the most questions also get the easiest ones. Fewer, more complicated questions can take more time than lots of easy questions. A staff can get a large number of questions and direct people to sources rather than helping them or teaching them through the process. Another staff can get the same number of questions but take the time to go the extra mile and really help the patron. And there's always the reference librarian who isn't going to take less than twenty minutes to answer any question, regardless of how simple, and regardless of how frustrated the patron and fellow staff (taking up the slack) get in the process.

Reference service is too complex and too important to be judged simply on the basis of how many reference questions any group of people answers. At some point, we have to deal with the quality of that service. If we don't know what quality we have, we have no way to determine if we're improving or getting worse, what kind of training for the reference desk works, and whether or not individual reference librarians are doing a good job.

The first attempt to confront the question of the accuracy of reference service in libraries was reported in 1969.[1] The researchers used "anonymous shoppers" to ask questions of reference librarians in public libraries, and the results were disappointing. The authors reported the following shortcomings: "minimal interest in exactly what inquirer is seeking, failure to recognize fairly well-known titles, undue dependence on somewhat outdated books rather than on current reports in answering requests for recent information, a concept of resources limited to the book or at most the book and the magazine rather than to the full range of communication media, and lack of initiative on the part of staff in seeking material

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from another source if the local library does not have it."[2]

Twenty years later, there is no indication that libraries are doing any better. In his 1984 article on reference evaluation, Alvin Schrader concluded that "unobtrusive procedures have not yet become a component of the standard methods for evaluating library and information service performance."[3] He continued, "The problem of the lack of commitment to reference service excellence will neither go away nor be resolved by the kind of passive approach which has so far characterized our efforts. Researchers, educators, and practitioners must, first and foremost, acknowledge the existence of problems with respect to reference service accuracy. This acknowledgment has not yet occurred on a wide scale. Until it does, until our community is prepared to take seriously the call for reference service accuracy, unobtrusive performance measurement will remain as the next frontier for library and information services. As of now, we are still in the age of misinformation."[4] The editors of the collection in which Schrader's article appears have an even more succinct analysis of our current situation, "It is suggested by the papers in this collection that one reason librarians suffer the ignominy of low salaries and even lower community respect is that they do so badly at their work."[5]

In 1985, Terence Crowley, the originator of "unobtrusive" questioning to determine reference accuracy, summarized the research in his article, "Half-Right Reference, Is it True?"[6] He concluded that although unobtrusive methodology had been accepted by researchers, it had not yet become a tool for evaluating reference service in the field, and he expressed concern: "Until librarians deal effectively as a profession with the many and seemingly endless sources of error in reference work, we will remain passive observers of popular culture. Some of us will provide timely, appropriate, and consistently accurate information, but the institution in which we work will not be fulfilling its potential role in the information age."[7]

Many reference administrators continue to object to the use of unobtrusive testing on ethical grounds. What I personally find unethical is advertising a service which is often of questionable quality. However, the library profession has had more than twenty years to adopt unobtrusive testing as a method of evaluating reference service and has not done so, and there is little likelihood that it will become an accepted method of library evaluation anytime soon. That is why I was so interested several years ago to read of the Wisconsin-Ohio Reference Evaluation Project being developed by Charles A. Bunge from the University of Wisconsin-Madison and Marjorie E. Murfin from Ohio State University.[8]

Reference service is too complex and too important to be judged simply on the basis of how many reference questions any group of people answers.

At that time, the program had been used in a number of academic libraries and was being tailored for public libraries. I was working at the Cumberland County Public Library & Information Center (CCPL&IC), and decided to contact Dr. Bunge to have CCPL&IC become part of his program. What we called the "Bunge forms" were used at CCPL&IC during 1988. The process is simple. The library receives a set of two-part forms, one part for the patron, a corresponding part for the librarian. When a patron asks a question, the librarian gives the patron one part of the form, and the librarian makes a quick note of the question on the second part of the form. After the transaction is completed, the librarian fills out the rest of the form, answering such questions as how busy the library was when the transaction occurred, how difficult the question was, how many sources were consulted, and whether the question was answered or not. The patron part of the form includes demographic information as well as questions about how busy the librarian seemed to be, how difficult the question was, and whether the patron's question was answered. When all the forms are completed, they are sent to Dr. Bunge and analyzed, and the library receives a lengthy report detailing the library's performance and comparing it to that of other participating libraries. As a person who had also been involved in unobtrusive testing of reference service at the same library, I found the Bunge-Murfin program to have many of the same benefits that unobtrusive testing has, without being nearly as time-consuming or potentially threatening to staff.

I did work the reference desk during some of the time that the forms were being used in Cumberland, and I would like to share one experience that illuminated for me how we often cannot trust our own perceptions of whether or not we are doing a good job at the reference desk. A patron asked me a question about government grants. I asked some follow-up questions and decided that the reason that I could not get a clear picture of what the patron wanted was because the patron herself was not certain. I did what I usually do in those situations: I gave her a reference book to start with and asked her to return for further help if she needed it. She did not return for further help, but did return the book, and at the time gave me her part of the form. I asked her if she had found what she needed and she said yes. After she left, I looked at the form.In the part where she was to indicate if her question had been answered, she had responded no. Some of us have long suspected that the many positive evaluations that libraries receive from patrons are not entirely related to reality. In this case, a patron was willing to be honest on a form, even one that she was handing directly to the person who had failed to help her, at the same time that she was not willing to be honest with that person face-to-face. That one interaction was enough to convince me that using the Bunge forms would give us information that we were not getting with our self-evaluation methods, such as the number of reference queries answered within twenty-four hours.

A frequent challenge to tests of reference accuracy is that they employ factual questions that are not typical of those asked in libraries, that the majority of questions asked in libraries are more complicated, and that librarians do very well in answering them. In the libraries that have participated in the Wisconsin-Ohio Reference Evaluation Program, eighty-five percent of the questions asked were not strictly factual, and librarians were "less adept" at answering these. In Bunge's view, "that's to be expected, because the 'non-factual' questions are less definite, and the opportunities for patron dissatisfaction are greater."[9]

The other most exciting work being done in the area of reference evaluation is that developed by Ralph Gers and Lillie Seward when both were at the Maryland State Library.[10] The Maryland program involved unobtrusive evaluation in public libraries throughout the state to determine the rate of reference accuracy. As part of the survey, the researchers observed the behaviors that librarians used during reference transactions, and then determined the behaviors that were associated with success in answering the questions.[11] Next they developed training sessions for reference librarians (administrators came, too) based on what they deemed to be the most effective behaviors that they saw used during the unobtrusive survey. Those who participated in the workshops were encouraged to return to their libraries and train others. Following the workshops, the libraries were unobtrusively surveyed again. The results: libraries that had participated in the training had better success rates than those that had not.

Many reference administrators continue to object to the use of unobtrusive testing on ethical grounds. What I personally find unethical is advertising a service which is often of questionable quality.

Ralph Gers is now working independently, and for a fee, any library or group of libraries can contract with him for the workshops, the unobtrusive testing, or both. Although the cost for the package is high by library standards, the training is intensive and often very productive. Gers reports that he has just had his first one hundred percent library — after the training, this library answered every question correctly in the follow-up unobtrusive survey.[12]

While we can use the two methods mentioned above to evaluate reference service in our libraries and develop training to improve that service, the performance standards that we develop must also consider the environment in which reference service occurs. Library administrators must admit that their reference staffs are frequently asked to be far more than reference librarians. Perhaps the most difficult situations arise in those libraries where there is no separate security staff, so that a reference librarian is required one moment to be courteous and helpful with a reference patron, and the next moment must become The Enforcer, instructing a disruptive patron about the consequences of continued unacceptable behavior in the library. Add that to the fact that administrators frequently ask their staffs to do too much, to work too many hours at a public service point, and we may have a formula for failure.

A recent article in *RQ* refers to the extremely low morale that has been observed in many library reference departments.[13] The article begins with a summary of the research that has shown a correlation between the morale of workers in various jobs and their performance. The article then details a study by Ralph Lowenthal using various instruments to survey four public library reference staffs to determine the level of their job satisfaction. Following that survey, he used the Wisconsin-Ohio Reference Evaluation Program to determine the rates of reference success in those libraries. Not surprisingly, measures of job satisfaction such as perceived tension, stress and strain, emotional exhaustion, and disaffection from patrons were correlated with lower levels of reference performers. Conclusion: if a reference librarian is unpleasant for other staff to be around, that person probably isn't giving very good reference service, either. If an entire department is suffering from stress and strain, reference service in that library is probably suffering. Our performance standards must address the question of what volume of work a reference librarian can reasonably be expected to perform, both on a public service desk and off.

As a profession, we should no longer be content to assume that our libraries are giving good service.

Conclusion

Libraries have been reluctant to evaluate reference services qualitatively. Perhaps this is partially because such evaluation is difficult. Numbers, although they may be suspect when we examine them closely, are usually fairly easy to acquire. Perhaps it is also because by evaluating a service as "professional" as reference service, we are risking the discovery that our service, and therefore our profession, isn't always everything we'd like to think that it is.

Until we are willing to evaluate reference service in our libraries, we can have no empirical basis for determining what level of reference service we are giving. We will continue to have only our mushy assumptions as a profession about what standards of performance we should expect from our staffs and from our libraries.

As a profession, we should no longer be content to assume that our libraries are giving good service. We must take the responsibility for giving the good service that we persist in telling the public that we are offering. To do that, we must first determine what level of service they are receiving. Then we must do all that we can to maintain excellence when we have it, and to work toward better service when we find that service lacking.

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Performance Measures in Youth Services

Rebecca Sue Taylor

How many times have you been told by colleagues, library school professors, supervisors, and journal articles that you need to talk like, think like, dress like, and act like an administrator in order to get your department's fair share of funds, power, and respect?

How many times have you thought, "I've got more important things to do: plan the storytelling festival; get out the Toddler Time publicity; meet with the school librarians. I don't have time to play administration games."

Is there any reasonable way to balance your *real* work with what you must do to justify that work and ensure its continued funding and support? Here are a few suggestions to bring your life back into balance.

Step One

The first item of business is to stop and make an attitude adjustment. Taking time for study, research, reading, planning, and just plain thinking *is a legitimate use of your time.* You are a manager or supervisor because someone values your knowledge and experience. Taking time to read the current professional literature, attend professional meetings, and talk to colleagues is as much a part of your job as making sure there are enough reading records to last all summer.

A good place to start your reading is Barbara T. Rollock's *Public Library Services for Children*[1] published in 1988. It is probably the most current overview of the functions and methods ascribed to "children's services" since Dorothy Broderick's *Library Work With Children* was published in 1965.[2] It is interesting that even in the 1977 revision of Broderick's work (the "bible" for many of us now in the management levels of children's services) there is absolutely no mention of management, the planning process, output measures, or evaluation processes.

Rollock's work, on the other hand, focuses considerable attention on the management concerns of a children's librarian. She asserts that the major responsibility of a manager of public library children's services is to keep in touch with the ideas, concerns, and planning taking place in the entire field of librarianship, not just within youth services.[3]

. . . the major responsibility of a manager of public library children's services is to keep in touch with the ideas, concerns, and planning taking place in the entire field of librarianship . . .

Rollock covers national and state-wide standards as well as the development of performance measures as they apply to children's and youth services. She also presents a succinct and readable chapter on internal and operational management concerns. "Resting too comfortably, perhaps, on a tradition of success, practitioners of services to children have failed to offer objective proof of their techniques for measurement and evaluation."[4] Rollock discusses funding, staffing, setting goals and objectives, public relations, and concludes with the assertion that children's librarians need to develop goals and objectives, train staff to meet these written standards, and evaluate carefully departmental services in terms of the successful completion of these written goals and objectives. When one has carefully followed these steps one is in a far more effective position to demand an appropriate budget and to spend it effectively.[5]

Step Two

Next you need to take some time to familiarize yourself with the language and processes that your administration is using. Take time to ferret out your library's copy of *A Planning Process For Public Libraries.*[6] Published in 1980, this work replaced the national standards by which public

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libraries measure and judge their services. It is fairly technical and at times difficult reading, but even if you haven't already been through some part of the "planning process," you will eventually have to understand such terms as "data collection," "community survey," and even the ubiquitous "preschool door to learning."

Once you have at least a general understanding of what the planning process is and how it may involve children's services, take a look at the two manuals that were put out to enhance and supplement the original process. *Planning and Role Setting for Public Libraries*[7] provides the tools to begin an actual planning process as well as numerous sample forms to be adapted for local use. The chapter on writing goals and objectives is particularly good, presenting clear and practical methods for creating a framework upon which to hang future methods of evaluation, while accepting the fact that not all libraries or library systems will choose to expend the same amount of time and staff resources on the process.

Even more important is *Output Measures for Public Libraries*.[8] The chapter on data collection is excellent and should give you numerous ideas for the types of surveys that might be done within a children's services department. Chapter 4, "Interpreting and Using the Results," looks succinctly and rationally at what you may want to do with the statistics you have collected. Numerous types of forms for data collection are appended.

If the library does not have a capacity for self-criticism and change, an evaluation may only be an exercise in futility.

Step Three

Now that you are familiar with the reasons for internal measurement and the planning process, its structure, and terminology, you need to take some time to explore the types of things that you may be able to measure effectively. In the excellent and thought-provoking article,"Research and Measurement in Library Service to Children,"[9] Adele M. Fasick asks, "Why have librarians engaged in serving children been put on the defensive about the way in which they evaluate their services, and what can be done to bring children's services back into the mainstream of library thinking?" Her article discusses the problems involved in using conventional quantitative measurement techniques to measure the types of services provided by a children's services department:

> Although some of the reaction against quantitative measurement of children's services may be overly emotional, it is not true, as one of my colleagues once suggested, that "children's librarians are people who love children and hate statistics." There are some good reasons for protesting against the imposition of quantitative standards on children's work. There are problems in the evaluation of library services to children that simply do not exist in other types of library work.[10]

Adele Fasick also poses a number of youth-service-specific research questions which need to be measured and evaluated in ways different from the usual systemwide comparative measurements.

Probably the most important single article on measurement and evaluation of children's services is Mary K. Chelton's "Evaluation of Children's Services."[11] After an excellent review of the history of prescriptive standards and the development of the planning process, she spends considerable time discussing just what evaluation is and is not. Among her heartening and realistic assertions are:

1. Evaluation is not the way by which one's ultimate worth is measured.
2. Evaluation is not always complicated.
3. Evaluation will not always prove what you want it to.
4. Evaluation is not always quantitative (i.e., counting things) even when the results are presented and analyzed numerically.
5. Evaluation does not solve problems; it only provides the evidence needed to solve problems.[12]

Chelton continues with a detailed summary of specific types of evaluations; appended are sample instruments. The article concludes with the astute and to-the-point statement that: "The fact that a program has clear measurable objectives, valid measures, and sufficient resources to document itself does not ensure a successful evaluation although all those factors must be present in order to do one .... If the library does not have a capacity for self-criticism and change, an evaluation may only be an exercise in futility."[13]

Two other articles that are worth finding and studying point out some areas for evaluation that are specific to children's services. Diana Young's "Evaluating Children's Services"[14] presents a pertinent survey of questions every youth services administrator should ask and includes questions on facilities, materials, programming, and services.

Lesley S. J. Farmer's "Using Research to Improve Library Services"[15] points up a possible avenue of additional research and reading in discussing the Dallas Public Library's survey of effectiveness of preschool story hour delivery systems. Some public libraries have used current research in the field of child development to design programs that require the active involvement of parents.[16] The operative phrase here is "current research in the field of child development." Certainly it is an avenue more public library children's librarians need to pursue.

Is there any reasonable way to balance your *real* work with what you must do to justify that work and ensure its continued funding and support?

Step Four

If you are convinced by now that you need to be doing some type of evaluation or statistical measurement of your department's services, you may want to track down *Output Measures for Children's Services in Wisconsin Public Libraries* by Douglas Zweizig and others.[17] This report on the methods and results of a survey of children's services in Wisconsin's public libraries was not widely disseminated. It is well worth the time and effort it may take to obtain it through interlibrary loan from the Wisconsin State Library. The report includes several excellent measurement instruments that can be adapted for local use as well as detailed instructions on specific methods of data collection.

Items such as the "Census Work Form"[18] and the "In-Library Materials Use Log"[19] are well designed and the report's data summaries will give you some basis for comparison. One hopes that, in the near future, other states and library systems will replicate the survey, at least in part, and will begin to publish the results so that additional comparisons can be made.

Step Five

Now it's time to customize and tailor all your reading, research, and thinking to your library's specific needs. Make a list of the things you want your department to accomplish (your goals). Use your library's overall mission statement and goals but take time to think through the specific aims of your special service area as well. Are the activities and projects that your staff spends the most time on clearly reflected in a position of priority in your goals? Are they the things you want your department to be committed to accomplishing? Can you do them well?

Once you have a list of goals (or statements of the services you want to provide), take a look at the steps you must accomplish. As you list the steps (your objectives), think about how you can measure whether you have successfully achieved each step.

Step Six

Finally, it's time to accumulate some statistics and write some reports. Surprisingly, this may be the easiest part of the process. You may want to replicate parts of the Wisconsin *Output Measures for Children's Services* project, or you may want to use methods presented in *Output Measures for Public Libraries.* Have other systems in your area done surveys that you can adapt or replicate? Is it possible to adapt an instrument or process already in use in another department of your library, such as a reference question fill rate survey, to your needs?

Remember that your instruments don't have to be complicated and exotic to measure something. You may already have access to some of the numbers you need from monthly or annual reports of activities, such as program attendance and circulation statistics.

Do you have access to statistics specific to children's services already accumulated in reports and evaluations you have done in the past? A variety of measurements might be made from information routinely kept on summer reading club membership and reading accomplishments. An analysis of staff time-use patterns might be made from existing evaluations of programs that include a breakdown of the hours spent on planning, publicity, performance, and evaluation.

Don't forget to tailor your measurements to a children's services perspective. For instance, does measuring questions asked (i.e., reference and directional questions) actually show the number of personal contacts your staff had with patrons each day? Would it be better to measure "contacts" that include such interactions as helping a preschooler put together a puzzle or explaining summer reading club rules to a second grader?

Finally, control your evaluation instruments. Don't let them control you. If you wait to be told to do a fill rate survey, you will also probably have to use the form devised by your administrative team for use throughout the system. If you have already designed and made an evaluation that is meaningful to your special service population, you will have done a better job of representing them and their needs to your administration.

Make the time to explain to your supervisor, director, or administrative team what you are doing, why you are doing it, and how successful you are in doing it. Use numbers, charts, and graphs, but don't forget to include a narrative that compares and summarizes your results. Put your results and conclusions into written reports so that they become part of the official body of information used to make future planning decisions. In the end the thoroughness with which you document your program's activities, needs, and successes will have a direct result on the resources you will have to devote to story times, reading clubs, storytelling festivals, and the rest of your "real" work.

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Performance Measures and Technical Services: Efficiency and Effectiveness

Karen S. Croneis and Linda H. Y. Wang

Librarians are currently using performance measures to evaluate services. Because libraries are complex organizations with many interrelated departments, any evaluation of public services activities is also an implicit evaluation of technical services policies and procedures. Therefore, it is important for technical services librarians to be familiar with the concepts of performance measurement.

Efficiency and Effectiveness

Historically, the two components of evaluation have been efficiency (doing things right) and effectiveness (doing the right things). These two exist in an inverse relationship, that is, increased efficiency generally results in decreased effectiveness. For example, providing fewer access points may speed up cataloging but it also tends to decrease the user's chances of finding information.

F. W. Lancaster[1] has declared that, theoretically at least, technical services can be evaluated from two viewpoints. The first deals with internal efficiency.

As production units, technical services have valued efficiency and based their evaluations on that fact. Cost and productivity have been the primary considerations in evaluating internal efficiency. Technical services librarians have well documented their success as efficiency experts. There are many studies on a wide variety of technical services activities: time studies, cost-benefit analyses, vendor and systems evaluations, and others.

Lancaster also posits evaluation based on effectiveness, that is, on the long-range effect that technical services have on the public services of the library. The title of an excellent book, *Cost Effective Technical Services*, provides an example of how easily the two concepts of efficiency and effectiveness can be confused. Papers and case studies examined cost-efficiency (doing things more inexpensively) without a corresponding discussion of effectiveness. The question "Is this the right thing to do?" was generally not addressed.

Few studies examine the effectiveness of technical services, that is, their impact on public services. Granted, the number of studies on information-seeking behavior, book availability, and document delivery have increased significantly in the last fifteen years. These have not been as widely discussed in the traditional technical services literature because of the technical/public split.

Activities involving users have been seen as strictly "public services" issues and, therefore, "not technical services" issues. Likewise, "technical" equals "not public." Again, effectiveness has been the domain (and the problem) of public services while technical services have been concerned with efficiency.

This efficiency/effectiveness discussion has also been phrased in terms of quantity/quality. In discussing the trade-offs inherent in technical services, Carol Mandel concludes, "A formal and quantitative approach to analyzing questions of quality and productivity in technical services will result in a net benefit to library users."[2]

User Groups

To be valid indicators of library effectiveness, performance measures must incorporate user data.[3] Recognizing that users are individuals whose information demands may not match their information needs, the first step in using performance measures is to identify broad-based user groups.

When the term "user group" is mentioned, most technical services librarians think of a vendor- or system-based user group (e.g., NOTIS User Group, Music OCLC User Group). In the

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context of performance measures, however, the term "user group" refers to the people who "use" the results of the complex set of activities called technical services (acquisitions, cataloging, serials control, physical processing, binding, and preservation).

Technical services librarians have at least three user groups — the general public, public services librarians, and network users.

The first group consists of the "public," the well-defined group (or groups) of people who use a particular library for a particular reason. Most libraries create promotional and informational pieces that list various services targeted to specific market groups.

The second group of users that technical services librarians serve are the other staff members, primarily the public services librarians, at their own institutions. While the information needs of these two groups are different, they have the same basic demands: timely receipt and processing of materials, and easy access to the information contained therein. In this situation, timeliness can be seen as a measure of efficiency; access, of effectiveness.

Network members constitute a third user group. These people use the data records that technical services people have created and contributed to a cooperative database. The records might be used for shared cataloging, acquisitions, interlibrary loan, etc. Technical services librarians can easily identify the needs of this user group, primarily because they are also members of it.

. . . any evaluation of public services activities is also an implicit evaluation of technical services policies and procedures.

OPAC as Common Ground

Developing performance measures for these groups is challenging. Within each group are subgroups. Because individuals have many different information needs, they can belong to more than one subgroup. But, in an online environment, nearly all groups will use the online public access catalog (OPAC) to meet their needs. The automated catalog, "the keystone that joins the two areas of technical and public services,"[4] is changing the way people use libraries. New user behaviors and expectations, in turn, are forcing libraries to reevaluate their operations.

In 1985 Barbara Markuson[5] noted that most of our efforts have been devoted to automating the library and the functions of librarians, *not* to automating access and retrieval systems for our users. OPACs, like card catalogs, are windows on collections and gateways to information. As such, an OPAC must be evaluated in terms of the information it contains, how easy it is to use, and how effective it is.

Catalog Use

Research on catalogs generally falls into two areas: catalog use studies and catalog user studies. In their informative 1983 review article on catalog use studies, Pauline Cochrane and Karen Markey[6] categorized the questions regarding online catalogs and then identified successful methodologies for studying each category. In doing so, they provided a framework that continues to serve as well.

Users expect, quite justifiably, that an OPAC will provide at least as much information or access as the card catalog. Gunnar Knutson[7] compared an online catalog with an existing card catalog to detect levels and types of errors on four access points: names, titles, series, and subjects. The online catalog had a lower failure rate in all areas except series. Knutson checked 200 bibliographic records with 905 online access points and found 23 errors, an overall error rate of 2.54 percent. Using Knutson's figures to extrapolate for 500,000 records, one would expect to find 2,262,500 online access points and about 57,500 errors, a raw number that most librarians and users would find absolutely unacceptable.

Consistency studies (subject cataloging and classification) and availability studies can give useful performance measures. In a recent study based on Paul Kantor's availability analysis, Deborah Barreau[8] identified four catalog problems that are most likely to interfere with patron success with the OPAC: (1) incomplete location information on the bibliographic record; (2) incomplete holdings information in the database; (3) special characters and punctuation in the index fields that were interpreted incorrectly by the search program; and (4) inadequate access points and display of fields in the default format. The terms "incomplete," "incorrect," and "inadequate" underline the fact that quality control is essential. Performance measures can be useful in quality control situations.

Catalog Users

Charles Hildreth[9] has pointed out that "the online catalog stands apart from earlier catalogs because it is interactive, infinitely expandable, and public." There is no question about the potential of the online catalog as a tool for rapid, convenient, and comprehensive research.

Unfortunately, there is little evidence that searching an OPAC (as opposed to a card catalog) increases a user's success in finding information. Cochrane and Markey[10] also concluded that "how the user and system interact is the important thing, not that the interaction occurs 'online'."

Studies of catalog users have focused on information-seeking behaviors but no conceptual model of user behavior has been developed. Until that time, data will still be only indicative and situation-specific.

Patrons use online catalogs differently from the way they use card catalogs, particularly for subject searching. In a recent study, Micheline Hancock[11] found that users adapt their search to the structure of the tools available. A major obstacle to effective subject searching may lie in the lack of interaction among the indexing language, the classification scheme, and the actual titles.

Simply put, query terms generated by users do not match catalog subject entries. The likelihood that any two people will use the same term for a concept or a book, or that a searcher and an information system will use the same term for a concept, ranges from ten to twenty percent.[12]

Understanding the information-seeking behavior of users is crucial in designing an online catalog that complements the search strategies of its users. Because OPACs are "public," search strategies can be recorded on transaction logs, examined and analyzed to determine what it is that users actually do in the search process. Success can be noted and problems identified. In one recent project, Thomas Peters[13] found failure rates (defined as those searches that produced zero hits) of approximately forty percent for all types of searches.

From such studies, librarians can establish baseline data and then compare those numbers with future performance measurements. Peters suggests that librarians use the information to develop bibliographic instruction programs and design OPAC teaching sessions that address the most prevalent problems. Bibliographers would be interested in summaries of the types and subjects of materials sought by OPAC users, both items in the database (for possible duplication) and items not in the database (for addition to the collection).

Marcia Bates[14] urges librarians to rethink subject cataloging in an online environment. Access should be determined by the total mix of pre-existing and added "search capability" indexing. This "superthesaurus" would be designed and geared to the needs of users rather than indexers. A very active area of current research is the examination of expanded subject headings based on systems such as the Library of Congress, Dewey Decimal Classification, and PRECIS.

Clearly, today's technical services librarians are, or will become, database managers and providers of value-added services. In the future, "information resources will be almost seamlessly interfaced so that the public has direct, timely, and effective access to what it needs to know."[15]

It is the librarians's job to state in quantitative, measurable terms what "direct, timely and effective access" is. "Direct" might translate into finding an item in the owning library ninety percent of the time. "Timely" would depend on circulation status; ninety-eight percent of the time, a user would have an item from interlibrary loan within ten days. "Effective" might mean that ten percent of the time a user gets zero hits on a subject search on the library's OPAC. Unreasonable? Maybe. But identifying the current levels of service, setting goals, and monitoring progress is what performance measures can do.

Some performance measures already exist and others are needed. Ideally, these can be developed by teams of technical and public service librarians who bring their own perspectives and expertise to an evaluation project.

Conclusion

Technical services' discomfort with effectiveness mirrors public services' uneasiness with efficiency. As OPACs are transforming the way people use libraries, they are also changing the relationship between technical and public services.

In 1986 Gillian McCombs[16] suggested that, in ten years (that is, by 1996), an evaluation of library services would become "mainly an evaluation of the information provided on the VDT screen — how much of it is there, how easy it is to obtain and how quickly." Perhaps her prediction is more accurate than some would like to admit.

Our shared mission as technical and public services librarians is to provide access to information. Using performance measures and other evaluation techniques, we can find ways to serve our users more efficiently and more effectively.

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Performance Measures for Online Systems

John Ulmschneider and Patrick Mullin

System performance: an overview

Librarians assess a library automation system by many parameters, such as the richness of its functionality, the ease of use of its interface, and its overall purchase and operating cost. One of the most important criteria is a system's *performance.* It is not uncommon for librarians to praise or condemn a system based on performance alone. But what do library managers mean when they speak of "system performance"? The "performance" of a computer application system can mean different things to different observers.[1,2] At one extreme, many librarians treat the functionality of the applications software as the main criterion of performance: what does the application software actually do, and how well or thoroughly does it do those things? At the other extreme, the computer industry has developed a number of performance measures for computer systems that distinguish the computing hardware's capabilities from the way application software uses those capabilities. Hardware evaluations center on such parameters as central processing unit (CPU) speed, data retrieval and transfer speed from disks, memory architecture, and the like. Software evaluations assess many aspects of the application's operations to build a final picture of its performance: the application's use of processing resources, disk storage and retrieval demands, instruction mix, response time, memory requirements, and other parameters (Figure 1).

FIGURE 1.

Hardware evaluation compared with software evaluation

Hardware evaluation	Software evaluation
CPU speed in million instructions per second (MIPS)	response time to interactive users
memory speed, caching	subroutine speed for boolean combinations
disk seek and read time	disk storage demands for data and work space
number and speed of communications channels	number of concurrent users or terminals supported

Performance measures for evaluating library automation systems include something from both ends of the spectrum. In general, library managers are not concerned with the capabilities of the hardware platform used for a system; they are concerned only with the way the application software performs for the user. Librarians also sharply distinguish responsiveness for interactive operations, where users query the application system in real time, from batch operations, where a series of programs is executed automatically by the computer. The performance evaluation of a library application system is assessed through three parameters concerned primarily with interactive operations:

Response time: how quickly a computer system delivers a response to a user query in an interactive environment;

Application efficiency: what computing resources (processor cycles, memory, disk space) are required by software to deliver an adequate response time;

Capacity: the volume or amount of work a system can perform with a given amount of hardware resources, for instance, the number of concurrent searches it can perform.

The relationship between these performance parameters is not straightforward. For instance, suppose an application system is very efficient on machine resources, with clever and tight code that minimizes the use of memory. Such an application might squeeze the most from the machine resources available to it, but might deliver poor response time because it does not use enough memory to speed up, sort, and merge operations. Or suppose an application delivers very fast

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response time, but requires enormous machine resources to do so. Such an application likely will be too expensive to maintain.

Because the relationships between performance parameters are complex, assessments of library systems must include data on all three performance variables. Library managers should require library application programs to meet certain minimum standards. For instance, the system ought not to require a supercomputer to perform boolean searches and should take less than five minutes to respond to interactive queries. Managers do not, however, expect them to show ideal scores in all three areas.

Each of the three performance measures lends itself to wide discrepancies in definition and application. An "efficient" program can end up using considerably greater memory resources than an inefficient program if it seeks to minimize the use of slow mechanical devices(e.g., disk drives, tapes) by storing volumes of data in main memory for instant access. On the other hand, a system providing high capacity might do so only under ideal conditions, for instance, when all the online catalog queries are known item searches. Because of these discrepancies, vendors and buyers of library systems should define exactly the nature of performance parameters expected of a system. In general, efficiency and capacity in purchase contracts are largely system-dependent measures, and standards for their performance pertain only to particular hardware-software combinations. Librarians have reached a general consensus, however, on response time: interactive queries should average no more than three to five seconds from transmission of a query to receiving an answer.

Response time

Of the three parameters, response time is both the most widely applied and least understood measure. For most library managers, response time generally means the time between transmission of a query to the system (by pressing the return key) and the time when characters first appear on the screen in response to the query. Many factors in the application system affect response time, among them the speed of disk drives and how much the software uses them, the memory available of the application software, and the number of concurrent users on the system. Most measurements of response time, however, include three distinct components:

. . . response time is both the most widely applied and least understood measure.

(1) *Transmission time:* the time required by the transmission channel to deliver queries from the terminal to the computer, and data from the computer to the terminal;

(2) *Application response time:* The time required by the application after receiving a query to process the query and to begin transmitting a response to the terminal; and

(3) *Display time:* The time required by the terminal to display the entire reply from the computer.

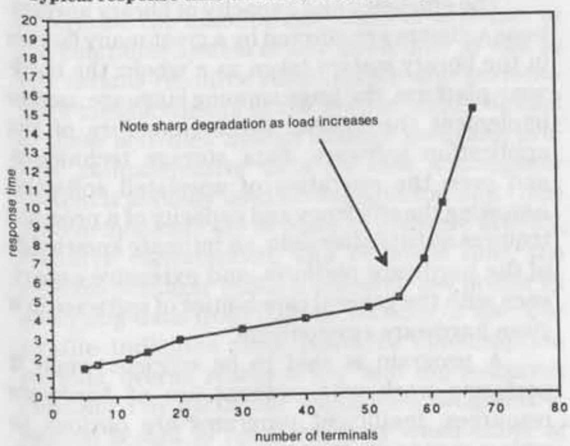
Response time measures usually do not distinguish the contribution of each element to the overall response time, even though users attribute the entire response time solely to the application software. Under normal circumstances, components 1 and 3 make a negligible contribution to response time, in the range of milliseconds. In special circumstances, however, their contribution may be significant. For instance, in local area networks, propagation of queries and responses through several miles of cables, translators, bridges, and routers can introduce significant delays. Modem connections may also introduce considerable delay. Even directly wired connections can slow down response time if the line speed is low or the output device is a printer. Because of these factors, vendors of application systems usually agree to meet response time criteria only in the context of control over the entire hardware plant, and they specify dedicated terminals using the fastest and most secure communications possible.

How is response time actually measured? Three approaches are possible. In the *stopwatch method*, one evaluator enters a query to an online catalog while a second evaluator times the query with a stopwatch. The second evaluator starts the timer at the instant the return key is pressed and stops the timer at the instant the reply begins to appear on the screen. Generally, the evaluators employ a carefully designed script that exercises most of the searching functions of the system in simple and more complex searches. The response time is averaged over all the searches and over a number of sessions. By using a number of terminals and users simultaneously, the evaluators can mimic a real online environment with multiple simultaneous searchers, subjecting the application system to a *stress test* or *benchmark test*. In its simplest form, a stress test measures the responsiveness of a computer system as more and more of its functions are used simultaneously. Stress tests usually identify a peak load, or number of concurrent users, beyond which performance becomes unacceptable. (See Figure 2.)

The stopwatch method is simple to implement, cheap, flexible, and expandable. It is also, by and large, a reliable method if done carefully. Nonetheless, human reaction time, communication time, and other variables may affect the final results.

FIGURE 2.

Typical response time under load revealed by stress test



In the *simulation method*, a desktop computer or a simulation program on the library system's computer is equipped with a search script, similar to that used in the stopwatch method, and is connected to the library application program. The desktop computer or the simulation program transmits queries and receives replies from the library application program, and measures very precisely the time between transmitting a query and receiving a reply.

The simulation method requires modest technical expertise to implement. It retains all the advantages of the stopwatch method while eliminating variables introduced by human participants. Just as with the stopwatch method, evaluators can establish a bank of computers, or a number of simulation programs, to execute simultaneously the prepared search scripts in order to subject a computer system to a stress test.

The *system monitor method* uses software on the computer system itself to record response time data on devices and software supported by the system. Most general-purpose hardware platforms for library automation systems provide system software to record statistics on the performance of a program in a number of areas: how much memory it uses, how often it accesses disk drives, how quickly it answers requests from terminals, and how much data it sends to them. Mainframe computers have used such programs for years to generate billing data, and they have tuned them to a high degree of accuracy and comprehensiveness.

Both the stopwatch method and the simulation method rely on searching scripts as models of anticipated user behavior to gauge actual system performance. The design of such scripts seldom reflects user reality. (Recent attempts to base scripts on statistical and qualitative evaluation of transaction logs, which are verbatim records of every query to a library automation system and every response of the system to the user, are improving the design of such scripts.) Instead, the scripts are thorough exercises of every aspect of an application system's functionality, with a mix of commands that cover every possible function in the system. The application system's response time to such a mixture certainly reveals its response in carrying out specific functions, but may not reflect its actual responsiveness in operational use.

The system monitor approach, in contrast, is a strictly empirical one. Rather than develop a model of user behavior, it exhaustively records an application's responses to actual users and search loads. Since it is capable of analyzing the data from hundreds of thousands of commands entered over extended periods of time, it also draws upon a much larger universe of experience that any model can construct. As a result, its measurements provide a more accurate and complete picture of response time than user models do and are free of biases resulting from a poorly designed mix or scheduling of test queries.

The system monitor method has two additional advantages. First, it is not implemented as a special test requiring staff participation, special test computers, or special software. Monitor software runs as part of the normal operating environment and generates reports on terminal activity and response time as part of the daily activity log of the system. Second, it provides a much more detailed and comprehensive picture of an application's performance, including data on its use of machine resources as well as response time. Data provided by system monitor programs bear importantly on understanding an application's efficiency and throughput, for instance.

System monitors measure response time at the point where the communications system connects to the computer, so that communication delays are not included in the response times. Managers can use this data to evaluate software performance independent of the communications plant and to help attribute response time problems to either software or communications. On the other hand, the actual response time experienced by a user is the most visible indication of an online system's performance. In general, library managers supplement system monitor reports with periodic monitoring of actual user response time, including stopwatch measurements when necessary.

Because of their inherent limitations, response time measurements that require search models are best limited to acceptance testing: the final tests of functionality and performance before a library accepts a vendor's system and pays for it. Managers may use them to strike periodic benchmarks, but they should recognize that the models do not usually reflect the actual use or response time of the system. System monitors should be used for pre-purchase tests by obtaining data from operational sites; such data may point to performance problems before acceptance. The data may prove particularly useful if the desired system is installed at a site closely matching the profile of the purchasing site, with user populations similar in size, interests, and activity, and identical hardware resources. Even under these circumstances, system monitor results should not be the basis of final acceptance for payment; it is simply too easy to overlook differences between one installation and another. After installation, however, library managers should receive regular system monitor data that reports actual performance of the software: response time, computer resource use, and the like.

Numerous observers have raised two particular concerns with respect to measuring response time in library systems.[3,4] First, online catalog searches vary widely in the amount of work they require of a program. Many searches are direct, known-item searches, where the program need only retrieve single records. Other searches may require locating, performing combinatorial operations with, and retrieving large sets of records. Second, the definition of a "search" is open to debate. Is a search concluded only when the user locates the information required? Or should library managers consider a search equivalent to a transaction, defined as a single interaction between user and computer?

Methods that rely on models address these concerns by using search scripts that exercise most of the functionality of the application software. The scripts include searches that require considerable processing as well as known-item searches, and usually provide for multi-step searches (e.g., perusing an index list, selecting a retrieval set, and then narrowing the set to find the desired item). The system monitor method, on the other hand, cannot distinguish difficult from simple searches; it measures the response time for individual transactions, regardless of their type. System monitor methods compensate for this limitation by processing a very large transaction volume, which ultimately produces a statistically valid judgment of normal response time.

Efficiency and Capacity

The efficiency and capacity of library applications software are affected by a great many factors in the library system taken as a whole: the hardware platform, the programming language used to implement the system, the architecture of the application software, data storage techniques, and even the operation of unrelated software. Assessing the efficiency and capacity of a program requires quantitative data, an intimate knowledge of the hardware platform, and extensive experience with the general capabilities of software in a given hardware environment.

A program is said to be efficient when it performs work with optimal use of hardware resources. Inefficient programs are obvious to system managers; they require prodigious resources to perform simple tasks. Efficient programs are not so easily pinpointed. Generally only close examination of the actual code or architecture of an efficient program reveals areas for improvement (or admiration). For example, a programmer can improve the efficiency of a program by decreasing disk drive access, memory resource use, or CPU time to perform a given task. Efficiency judgments extend to suites of applications programs as well as to single programs, since library applications often consist of a number of programs performing different tasks in concert. The overall architecture of a system can be considered efficient or inefficient, depending on how it uses system resources.

Efficiency bears directly on capacity. Capacity measures the amount of work a computer system can perform given a certain mix of machine resources and programs. Capacity relates to the computer system as a whole, not just to a given applications program, since both available hardware resources and a program's use of them determines the amount of work possible. Efficient programs make better use of hardware resources. A computer running efficient programs can perform more work in any given machine configuration than one with inefficient ones. For instance, efficient programs may permit the system to handle up to twenty concurrent users, while inefficient programs may reduce this capacity to only ten or twelve. The types of work performed on a computer system also affect its capacity. Certain users or activities require more hardware resources than others and can affect overall capacity significantly. For example, catalogers and other technical support users editing the database usually require a great deal more CPU support, disk access, and the like than someone merely searching the catalog.

The first step in measuring capacity is to determine the amount and kinds of activities in the computer system at any given time as well as the various resource consumption and performance measurements of the system while engaged in those activities. System monitor programs provide comprehensive data on how a computer system is actually used throughout the day. Once system monitors are in place to measure activity, resource consumption, and response time, the systems manager builds a resource use profile by analyzing data from days or months of use. The profile indicates peak resource consumption periods, overall resource use, and the resources consumed by particular application programs. A system is said to reach capacity when either of two events occurs:

(1) Consumption of hardware resources reaches defined maximum limits. The defined maximum resource use of hardware platforms, beyond which additional resources are recommended, varies from manufacturer to manufacturer. Most manufacturers consider a CPU saturated, for instance, at about eighty-five percent average use. Disk storage reaches a maximum when growth space is not sufficient for short-term growth.

(2) Response time for online users degrades below a defined maximum. When response time degrades above an average of five seconds for most transactions, for instance, the computer system no longer has capacity for additional users.

Systems managers and librarians employ resource use profiles precisely to avoid reaching capacity on a computer system. By monitoring system resource consumption through frequent profiles, managers can model future system demand and project resource requirements necessary to maintain adequate response time, disk storage, and other resources.

A Management Example: Performance Measures at TRLN

The Triangle Research Libraries Network (TRLN) is a cooperative library automation project of Duke University in Durham, North Carolina State University (NCSU) in Raleigh, and the University of North Carolina at Chapel Hill (UNC-CH). TRLN has focused on the Bibliographic Information System (BIS) as the core and first module of an integrated library system. The circulation control module is currently undergoing beta testing at NCSU. A vendor-supplied acquisitions and serials control system will be implemented by all three institutions. The TRLN system is a distributed system. Tandem computers located on each campus support the catalog for that campus. TRLN's unique software allows library patrons to search any one of the catalogs in the network or to search multiple catalogs simultaneously, dis-

FIGURE 3.

Summary Terminal Use And Response Time Report By Terminal

DATE OF THIS REPORT: 03/06/90 RUN TIME: 04:10:56 AM

TERMINAL-NAME		REP-DATE	TOTTRAN	AVERAGE RESPONSE
$ATP0	#VAX1	03/05/90	219.00	4.56
$ATP0	#VAX2	03/05/90	674.00	4.88
$ATP0	#VAX3	03/05/90	92.00	2.67
$ATP0	#VAX4	03/05/90	666.00	3.65
$ATP1	#DCA1	03/05/90	1089.00	4.20
$ATP1	#DCA2	03/05/90	768.00	3.64
$ATP1	#VAX5	03/05/90	290.00	4.00
$ATP1	#VAX6	03/05/90	481.00	3.60
$ATP2	#DCA3	03/05/90	623.00	3.83
$ATP2	#DCA4	03/05/90	961.00	4.19
$ATP2	#DCA5	03/05/90	164.00	3.30
$ATP2	#DCA6	03/05/90	534.00	3.60
$ATP3	#DCA10	03/05/90	423.00	3.60
$ATP3	#DCA7	03/05/90	1089.00	3.84
$ATP3	#DCA8	03/05/90	717.00	4.53
$ATP3	#DCA9	03/05/90	263.00	4.11
$ATP4	#DCA11	03/05/90	773.00	4.69
$ATP4	#DCA12	03/05/90	848.00	4.45
$BSCTR33	#BASS1	03/05/90	307.00	4.38
$BSCTR33	#BASS3	03/05/90	76.00	8.07
$BSCTR33	#CIRC1	03/05/90	65.00	3.24
$BSCTR33	#HUM1	03/05/90	367.00	3.51
$BSCTR33	#HUM2	03/05/90	100.00	3.72
$BSCTR33	#HUM3	03/05/90	170.00	4.43
$BSCTR34	#CHEM1	03/05/90	126.00	4.18
$BSCTR36	#PUBB1	03/05/90	786.00	3.67
$BSCTR36	#PUBB10	03/05/90	811.00	3.59
$BSCTR36	#PUBB11	03/05/90	786.00	3.71
$BSCTR36	#PUBB12	03/05/90	520.00	4.30
$BSCTR36	#PUBB2	03/05/90	302.00	4.76
$BSCTR36	#PUBB3	03/05/90	529.00	4.02
$BSCTR36	#PUBB4	03/05/90	333.00	3.83
$BSCTR36	#PUBB5	03/05/90	1286.00	3.84
$BSCTR36	#PUBB6	03/05/90	861.00	4.07

Response time average per transaction for all terminals: 3.80 seconds

Total number of transactions for all terminals: 32,644.00

NOTE: A transaction is equal to reading a command and outputting a response to the command.

playing the results as a merged retrieval set.

The three TRLN universities use two system monitor tools available on their systems to generate and analyze performance data. The system resource and performance monitor software MEASURE, available as part of the Tandem operating system software, collects detailed data on terminal response time, application resource use, and other items of interest (e.g., communication line activity, disk drive accesses). ENLIGHTEN, a third-party product from Software Professionals, Inc., can be used with MEASURE-created files to construct graphic representations of the data either online dynamically or in print format.

The TRLN libraries use MEASURE to collect response time data, to analyze software efficiency and pinpoint areas for improvement, and for capacity modeling and projection. Capacity modeling and efficiency analysis requires the collection and analysis of enormous volumes of data, usually on a great many hardware and software parameters simultaneously. Because of the volume, this kind of data is collected only periodically, and then through well-defined samples of system activity throughout the day (see below). On the other hand, data on the number of transactions on the system and the average response time for those transactions by port or terminal (Figure 3) and by time of day (Figure 4) is monitored constantly. The transaction response time reported by MEASURE is not the user-apparent response time. MEASURE calculates only the response time from the moment a command is received by the Tandem system to the moment a response is sent from the Tandem to the user device. It does not include communication time or display time.

This basic transaction and response time information is used in a variety of ways at the three universities: to prepare reports and track trends; to justify, plan, and budget equipment purchases; and to analyze the workload on and balance of the composite system. Each of the three universities reports the average number of daily transactions on its system and the average response time in the monthly *TRLN Project Status Report*. Despite different hardware configurations, the data provides some indication of the relative use of the three Tandem-based systems. For instance, in the fall of 1989, each TRLN institution experienced a sharp increase in the level of transactions, some by nearly forty percent. Other statistics, collected within the libraries, corroborated this increased use of library services. Circulation, for instance, increased nearly thirty percent at NCSU.

FIGURE 4.

Summary Terminal Use And Response Time Report By Time of Day

DATE OF THIS REPORT: 03/06/90 RUN TIME: 04:11:54 AM

FROM-TIME		TO-TIME		AVERAGE RESPONSE	TOTAL TRANSACTIONS
08:00:00	AM	08:30:00	AM	2.38	413.00
08:30:00	AM	09:00:00	AM	2.74	784.00
09:00:00	AM	09:30:00	AM	2.94	764.00
09:30:00	AM	10:00:00	AM	3.13	834.00
10:00:00	AM	10:30:00	AM	3.73	1143.00
10:30:00	AM	11:00:00	AM	4.29	1528.00
11:00:00	AM	11:30:00	AM	5.05	1665.00
11:30:00	AM	12:00:00	PM	7.15	1777.00
12:00:00	PM	12:30:00	PM	4.80	1649.00
12:30:00	PM	01:00:00	PM	3.71	1112.00
01:00:00	PM	01:30:00	PM	3.75	1127.00
01:30:00	PM	02:00:00	PM	3.83	1264.00
02:00:00	PM	02:30:00	PM	4.58	1580.00
02:30:00	PM	03:00:00	PM	4.27	1390.00
03:00:00	PM	03:30:00	PM	3.81	1192.00
03:30:00	PM	04:00:00	PM	3.98	1430.00
04:00:00	PM	04:30:00	PM	4.07	1227.00
04:30:00	PM	05:00:00	PM	4.18	1383.00
05:00:00	PM	05:30:00	PM	2.96	950.00
05:30:00	PM	06:00:00	PM	2.93	788.00
06:00:00	PM	06:30:00	PM	3.07	860.00
06:30:00	PM	07:00:00	PM	2.73	586.00
07:00:00	PM	07:30:00	PM	2.93	582.00
07:30:00	PM	08:00:00	PM	3.51	1034.00
08:00:00	PM	08:30:00	PM	3.41	1171.00
08:30:00	PM	09:00:00	PM	3.75	978.00
09:00:00	PM	09:30:00	PM	3.27	842.00
09:30:00	PM	10:00:00	PM	2.62	552.00
10:00:00	PM	10:30:00	PM	2.61	832.00
10:30:00	PM	11:00:00	PM	2.96	452.00
11:00:00	PM	11:30:00	PM	1.92	202.00

Response time average per transaction for all terminals: 3.80 seconds

Total number of transactions for all terminals: 32,644.00

NOTE: A transaction is equal to reading a command and outputting a response to the command.

On each campus, this basic transaction and response time information is reported to the library administration, library staff, and library users (e.g., Figure 5). It can be used to demonstrate progress or to warn of potential problems. In 1987, for instance, TRLN began to re-examine its software programs, rewriting many of them to increase the efficiency of the system. The resulting thirty-five percent increase in efficiency provided sufficient processing reserve to absorb the sharp increase in transaction levels in the fall of 1989 and still maintain "acceptable" response time. On the campus of UNC-CH, the data has been used to monitor the need for additional terminals in the House Undergraduate Library based upon the average number of transactions per day per port or terminal. As a result, in the past two years, the number of available terminals in that location has been doubled.

The records of terminal activity in a particular area also can be used to question the need for a terminal in areas of light or low use. For instance, at UNC-CH, a terminal in one department generated only ninety-nine commands in a two-week period during February 1990. On the basis of this data alone, it would seem that a terminal in this area was not justified. Such data should mandate a review of justifications for maintaining a terminal in little-used locations.

The daily statistics can be used to schedule batch jobs which contend with online functions for resources. Through a semester, TRLN staff monitor busy times and busy days of the week. As might be expected, activity declines sharply late Friday afternoon. Tuesdays, however, are as busy as or busier than Mondays. TRLN staff generally schedule extensive processing runs during low-use periods.

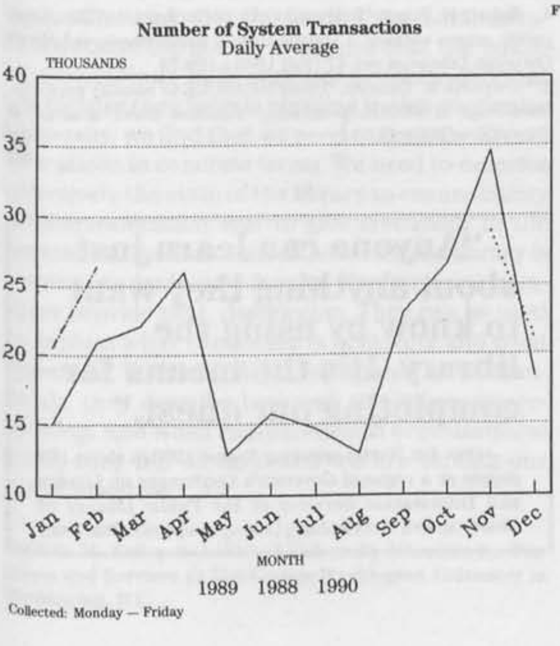
Terminal activity levels also can help identify physical conditions that lead to heavy use of terminals. In the cluster area of UNC-CH's Davis Library, for instance, one terminal is more heavily used than any other. Two characteristics distinguish this terminal: (1) it has more room for users to set materials down on either side of the terminal than do other terminals in the cluster, and (2) there is ample "personal" space because it is separated from other terminals, so that no other terminals (and hence no other users) are close by.

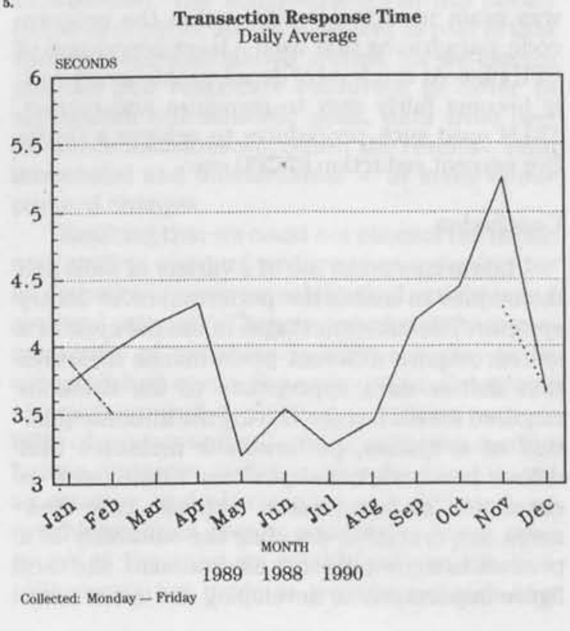
In planning and budgeting for the normal growth of systems, the pattern of current use can be called upon to project future needs. The increase in transaction levels needs to be closely monitored to determine the need for additional terminals and the need for additional processor capacity. This growth in transaction levels, coupled with the increase in data base coverage through retrospective conversion and new services such as the implementation of the TRLN Circulation Control Subsystem, must all be factored into planning the annual budget allocations and biennial budget proposals.

Dial access is one area where this data should be carefully monitored. A frequent question about remote access is: how much is enough? The simplest answer is that there is no single answer; it is always changing. The question should be how to monitor its use and to plan for its growth. Unfortunately, managers cannot know how many so-called "invisible users" exist, and these users as a rule do not inform managers about problems in accessing the online catalog. Even if users frequently encounter busy signals when they try to access the catalog, library managers may never find out that their remote access ports are constantly busy. In cases where the majority of remote access comes from links into existing campus networks, there may be no easy method to determine how often users are denied access to the catalog because its network slots are filled. (Interestingly, while in-house use increased dramatically at UNC-CH in fall 1989, dial access use showed no corresponding increase.)

MEASURE and ENLIGHTEN are used to monitor processor loads, memory use, disk activity, and other processes. With these tools, the systems

FIGURE 5.





manager can generate graphical displays showing the use of processor capacity and memory resources, and the distribution and timing of disk use among multiple disk drives. In a multi-processor configuration, the tools can show how the load is distributed over the processors (e.g., where the load is heaviest and where the load is lightest). All of this information is necessary to "balance" or "tune" the system load across the available processors and disks. System tuning directly impacts the efficiency of the system and the user-apparent response time. As hardware is added or new programs installed, the resource balance must be re-examined and the system tuned to preserve optimal use of resources.

BIS is implemented as multiple copies of a suite of programs. One advantage to this approach is to provide redundancy in the event of a system problem or crash. NCSU, for instance, runs six copies of the BIS software. If a problem occurs on one copy, it affects only one-sixth of the terminals. The terminals are distributed across the six systems based upon the load level, location, type of activity, and other factors. As new copies of the software are added to the system, the systems manager can use daily transaction data to redistribute terminals and maintain optimal transaction balance among the copies.

In addition to load balancing, these performance measurement tools can be used with the individual programs to gauge their relative efficiency and to identify where improvements can be made. In one project at TRLN, MEASURE was used to calculate the CPU time in milliseconds per transaction for each program.[5] A program could then be selected for closer scrutiny and MEASURE was again used to identify, within the program code, paragraphs that used a large percentage of CPU time. At this level of detail, problems generally become fairly easy to recognize and correct. TRLN used such procedures to achieve a thirty-five percent reduction in CPU use.

Conclusion

Librarians make use of a variety of tools and techniques to assess the performance of library systems. The different stages in the life cycle of a system require different performance measures that deliver data appropriate to the decisions required for each stage. During the initial acquisition of a system, performance measures that deliver benchmark and peak load data, such as simulation and stopwatch response time measures, are crucial to deciding the suitability of a product to a given library's environment, and they figure importantly in developing the initial hardware configuration for installation. Throughout the production life of a system, system monitor data provides regular assessments of the capacity, response time, and utilization growth of the system. In particular, library managers closely monitor response time, because it remains the single most important determinant of user satisfaction. At the end of the life cycle, system monitor data forms a significant part of the management data required for functional design, performance specifications, and hardware configuration for migration to a new library system.

Performance measurement tools provide basic management data to support a variety of decision points during the production life of a system. Initial purchase, system tuning, terminal allocation, load balancing, optimal timing for resource-intensive processing, and system migration all depend upon comprehensive data concerning the kinds of activities and their resource demands on the system. It behooves library managers to develop an understanding of the nature and use of performance measures, to become familiar with different performance measures, and to ensure that their systems provide the data they require for system management decisions.

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"Anyone can learn just about anything they want to know by using the library. It's the means for completing our quest."

—Gov. Jim Martin speaking August 1990 to about 150 people at a regional Governor's Conference on Library and Information Services at the Public Library of Charlotte and Mecklenburg County in uptown Charlotte.

Theory Into Practice

Patricia M. Kelley

Performance Measures: The Theory

Rightfully so, an academic librarian who is considering the implementation of performance measures will question whether the usefulness justifies the time and effort required. After all, don't we already know whether or not our libraries are doing the best job possible with the resources at our disposal? The short experience with performance measures of Gelman Library at The George Washington University indicates that the time and effort are well spent and that measures help to provide objective evidence to support or refute our intuitive professional evaluations of how well we are serving our community.

The data we have gathered offer few surprises. Like librarians everywhere, we have a fairly good sense of where our successes and difficulties lie. Our dilemma is that each person is familiar with a few pieces of a puzzle that portrays a complex service organization. The shapes of our puzzle pieces change continually, however, with the introduction of new technologies, the rise and fall of budget allocations, turnover of staff, programmatic changes in our parent institution, and resource sharing opportunities. As we work with each other and with the faculty and administrators outside the library to ensure that the puzzle pieces continue to fit together properly and that the picture they form is pleasing to this particular university, we find that we need to describe library operations in concrete terms. We need to describe objectively the state of the library to ensure clarity of communication and to give credibility to the assessment we make about how well the library is serving students and faculty. Performance measures provide that description. They can be used to explain what the library is achieving and what resources it needs. When compared with standards, they describe how well the library is performing. And when compared with organizational goals, they tell us how well we are serving our target clientele.

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In reality, how can an academic library institute performance measures? This article describes why and how the Gelman Library initiated a program of performance measures, how we measured the accessibility of collections and services, and my assessment of the experience.

Performance Measures: The Practice

Why did the library institute performance measures?

Use and user studies have been conducted in Gelman Library for a variety of purposes for years, but the decision to create an ongoing program of performance measures emerged as a result of our formal planning process in 1986. Believing that the library needs to be a dynamic, change-oriented service organization, the university librarian introduced a strategic planning process. One critical element of this process is the environmental scan, which requires that we understand both our external and internal working environment. In part, a management information system helps to describe our internal library environment. The administrators in this library conceive of performance measures as part of that management information system. As we change policies and reallocate resources in order to accomplish our strategic goals, data from performance measures will reflect the results— both intentional and unintentional — of many of our planned changes.

Realizing that we could not allocate the necessary staff to conduct performance measures for all activities at once, we categorized activities and assigned priorities. Then we scheduled the implementation of measures in each category to be accomplished over a five year period. Categories of activities were designated as follows: accessibility of services and collections; collection quality; human resources; facilities; user education; library as gateway; and planning process. Although we roughly grouped library activities in these categories at the time we established the timeline, refinements are made as we address each one.

For example, we defined accessibility of services and collections to include in-house collection availability, turnaround time on interlibrary loan transactions and on searches for unfound items, utilization of equipment, and length of lines at service points.

Except for the accessibility category, our timeline relates to major events in the predictable future. For example, collection quality assessment began during the year when the Library played its first significant role in academic program review. Accessibility studies were selected as our first category because we had specific questions we wanted to answer, and because we wanted to learn more about the pattern of use by our primary user group as compared to that of visitors who make up a significant proportion of our user community. To understand our concern and why we believe that performance measures provide much better management information than does our professional judgment by itself, some information about this library will be helpful.

Gelman Library is the main university library on the main campus of The George Washington University. Our primary user groups, and therefore our target audience for collections and services, are the faculty, students, and staff of this University and, to a slightly lesser degree, the students and faculty of other member universities of the Washington Research Library Consortium. However, the campus is located in downtown Washington, D.C., adjacent to the Federal office area and easily accessible to more than seven hundred consulting firms and law firms. Unlike many urban university libraries, Gelman is available for on-site use by any member of the public who presents current photo identification at our registration desk. As a result, researchers from government agencies and private firms form a significant non-target clientele. Because the majority of our students are graduate students and most of them are employed in local government agencies or private firms, the "visitors" are not readily distinguishable from the students and faculty. This inability to differentiate at a glance complicates our ability to make informal assessments of how well we serve our primary clientele. Just to make things really challenging, we share a building with a number of administrative and academic offices and classrooms. Unfortunately, all of these non-library activities are accessible only through the Library's main entrance.

Selection and implementation of performance measures

The first and most essential step in establishing a performance measures program is educating the staff. Unless the staff understands and buys into the process, measurement of library activity is likely to be viewed negatively. We are so accustomed to thinking in terms of goals and standards and so accustomed to one-shot surveys, that it is difficult to accept the concept that measurement done consistently over time and done independently of standards will be valuable. The educational effort in Gelman Library had several components. One was an addendum to the strategic planning document which described the measurement and assessment model we would implement. That model defines measurement — as distinct from assessment — and lists the components of the process that pertain to each. Every staff member received a copy of the plan, including the addendum, during a staff gathering in the fall when the university librarian explained the reasoning behind the various provisions of the plan. In addition, articles about measurement appeared in our weekly staff newsletter. The most concentrated educational activity was the management retreat, which was attended by all administrators and heads of library departments and units. This one-day retreat focused on performance measures, with a short session on statistical reports that we file with local, regional, and national bodies. Because these reports tend to include primarily input data (budget, number of staff, and other resources) and very little output data (performance data such as reference statistics, loan transactions, etc.), dealing with the two topics in one retreat helped to clarify how performance measures differ from the data libraries traditionally collect. Aided by a specialist in educational measurement, we used the retreat as a workshop to learn the concepts and some techniques of measurement. As a result of the retreat, key staff members were able to imagine the usefulness of measurement in their own decision-making.

The first and most essential step in establishing a performance measures program is educating the staff.

During the 1987/88 academic year, I identified the kinds of studies that would tell us how successfully users actually locate books in our library, the length of lines at service desks, and whether or not we have sufficient equipment to provide access to the collections. Because we defined accessibility in its broadest terms, the equipment usage we studied included our catalog (which was on compact disc), indexing and abstracting services on compact disc, microform readers and printers, photocopy machines, and elevators. In the beginning, I drew on the published literature, experience, and a somewhat similar study conducted by Tracy Casorso in Gelman Library two years previously. Then I worked with a number of individuals and groups to design, plan, and implement the studies.

I sought two sources of expertise. One was statistical; the other was operational. A professor of management science and psychology provided the statistical and research design assistance. He offered invaluable advice about sampling, validity and other technical concerns. Most of all, however, he gave down-to-earth practical advice. He reassured me that studies done for purposes of management decision-making are quite different from experimental or laboratory research, where conditions can be controlled. Because our research is done in the real world with real library users (who may or may not be cooperative), where all kinds of events beyond our control influence human behavior, we need to note the events that may affect the results of our study. But those events do not invalidate the study. For example, if an exam in a large music class is scheduled for the day after our randomly chosen survey day, the use of audio equipment in the Media Resources Unit will be abnormally high. That will not be a "typical" day in that unit, but it isn't atypical either, so we note the cause of the high volume of use and include the data in the study.

The other source of expertise was the Gelman Library staff, the people who intuitively judge demand for services and adjust staffing levels accordingly. Not only did they provide a list of questions they hoped our performance measures would address, but they also gave thoughtful consideration to the selection of sampling time periods, design of data collection forms, and logistics. Because staff in this library work together in groups continually, it was easy to fit planning of performance measures into regular meetings of librarians, mid-level managers and supervisors, heads of service units, and so forth.

We planned data collection with the conviction that there is no such thing as a "typical week" in our library. There are, however, typical patterns within a week. For example, the usage patterns seem to be very similar on Monday through Thursday evenings. We identified nine such periods. Then we randomly selected nineteen dates during the fall 1988 semester for data collection, ensuring that we had sufficient representation of every survey period so that our survey samples would yield meaningful data. During the following spring semester we started a little earlier and were able to survey on twenty-two days.

In preparation for the surveys, we hired staff who would conduct the observations. We also developed and tested data collection forms for each study. One form, to be given to people using the serials lists, asked the users to note which journals they were seeking and whether or not they found the journal. Another asked users of the library's catalog to give the same information about the books they sought. Another set of forms was used by observers who walked through the library noting which machines were in use, which were out of order, how many staff members were working at specific desks, how many people were being assisted by those staff members, and how many people were waiting. Turnaround time on interlibrary loan requests, book search requests, and waiting time for appointment services could be derived from information noted on the normal request forms. Separate forms were designed for data collection at service desks, although these tended to be expansions on the data forms the staff routinely use.

Because we wanted to distinguish current GW faculty, staff, and students from alumni (a significant user group), from consortium faculty and students, and from all other researchers, we purchased labels in four colors to issue to library users as they entered the building. The color of the label indicated the individual's user category — GW user, consortium member, alumnus, or unaffiliated researcher. As individuals requested assistance at service desks or were observed using collections, library staff who collected were able to record transactions by category of user without having to ask each person about his/her affiliation.

On survey days the entrance staff, with assistance from additional staff during peak periods, handed each entrant a colored label and asked him/her to wear the label in order to help us conduct library surveys. Meeting some resistance by users who did not want to wear the label, on the second day we began offering a letter explaining the purpose of our surveys and the importance of wearing the labels. Over time we found that a large sign explaining the meaning of the various colors of labels answered most users' questions. As the survey progressed, people who were going to non-library portions of the building or just to study rooms declined the labels. But others wore the dots or presented them upon request as they sought assistance at service desks or when the observers made their rounds to record use of equipment and length of lines.

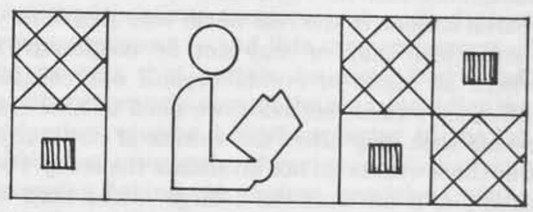
Most of our studies did not require conscious participation by library users. Library staff collected data through observation or as a routine activity during normal transactions at service desks. A user was conscious of being studied only if he/she failed to wear the colored label and, therefore, was asked to show the label to the data collector.

The only data collection that required conscious user participation was the collection use study, in which we asked people to note the books and journals they sought and whether or not they found the items. Users' willingness to fill out (or submit) the worksheets varied from modest to poor. As a result, while we received sufficient response to draw general conclusions about the causes of user failure to find the materials they sought, the decline in response rate over the course of the semester prevented us from answering some of our more specific questions. For example, we had wanted to know whether the causes of user failure varied by time of semester. The number of survey responses dropped as the semester progressed, leaving us with insufficient data to analyze variation by time of semester.

Usefulness of the measures

In this initial set of studies, we collected a great deal of baseline data that was useful in documenting demand for specific services by category of clientele. Many of our assumptions about usage patterns were confirmed, and some of our assumptions about our shortcomings were disproved. For example, we had believed that we had long lines waiting at photocopy machines and that unaffiliated users were tying up our *ABI Inform* stations. Neither of these turned out to be true. As a result, we decided not to purchase additional copiers and postponed implementation of measures to restrict use of the selected reference tools on compact disc. The impact of our malfunctioning circulation computer system and the crowded conditions of our stacks could be described objectively and quantitatively as a result of the collections use study. We could state with confidence that we have sufficient access tools of various types to meet users' needs, except at peak demand periods, and could identify the times and places where we most feel the impact of unaffiliated users. As a result, we have changed some service hours, changed some policies and practices (such as providing priority service to GW members who present identification at the Reference Desk), and identified improvements we would like to make if the opportunities arise. But most importantly, staff members who participated in data collection have a new awareness of the usefulness of performance data for decision making. Finding that the data disproved some of our assumptions provided a good demonstration of the need to base decisions on hard data mixed with experience and intuition.

In the 1990/91 academic year we will repeat some of the accessibility studies to determine whether the deselection process (which loosened up space in some stacks areas), a new circulation system, staffing reallocations, and some policy changes have had the desired effects. When we do that, the full usefulness of performance measures to record changes over time will be demonstrated. Meanwhile, we have proceeded with planning and implementing performance measures for other library activities.



The Evaluation of Service Activities in Academic Libraries and Criteria for Evaluation Selected by Administrators of Those Libraries

Sally Ann Strickler

Administrators of academic libraries encounter financial challenges today as during no other period in recent years. Institutional leaders demand accountability for costly materials, personnel, and services expenditures. Library administrators have the significant responsibility of carrying out academic library functions with inflated costs and decreased funding. Libraries are being challenged to prove their worth. Effective allocation and use of resources becomes a necessity.

The Association of Research Libraries (ARL) Office of Management Services (OMS) suggests that libraries must assess library services on either an ongoing or periodic basis. The *Standards for College Libraries* and *Standards for University Libraries*, prepared by the Association of College and Research Libraries (ACRL), both require evaluation of the library program. Each of the six regional accrediting commissions states that services of the library should be regularly evaluated to determine the library's effectiveness. Mindful of the needs of administrators of academic libraries, ACRL has prepared a manual of output measures for academic libraries which will assist librarians in measuring the impact, efficiency, and effectiveness of academic library activities.

The difficulty in assessing library service programs lies in the fact that available assessments do not measure the quality of service and must be cautiously interpreted. The literature reveals a great concern regarding the topic and is replete with research on "evaluation of library services," "measurement of library services," "quality values of library service," and "indices of effectiveness of library public services." None of the research, however, has fulfilled the assistance promised, that is, to produce suitable, serviceable guidelines for the qualitative assessment of the effectiveness of academic library services to be used for measurement of service, effective planning, and assessment of user needs.

Whether librarians want to evaluate their institutions or not, service agencies are currently on trial in a culture that is developing a deep skepticism, subjecting academic organizations to scrutiny as never before. Librarians will need to come forward with evaluative data to support their case, or fiscal authorities will assume that evaluation. Library directors must look for criteria other than quantitative or financial to determine the success of their institutions. What are these criteria? How do contemporary library directors, faced with a complex, dynamic organization, ensure that these criteria are met?

. . . service agencies are currently on trial in a culture that is developing a deep skepticism, subjecting academic organizations to scrutiny as never before.

The following questions reflecting my interest in this dilemma formed the major purposes of my recent research project. I sought to determine:

1. Which library services are now being evaluated?

2. How extensive is the current involvement of academic libraries in evaluation?

3. What are the attitudes of academic library administrators toward the evaluation of library services?

4. What criteria do academic library administrators consider important for evaluating the effectiveness of library services?

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5. What are the relationships among attitudes toward evaluation, the perceived importance of evaluative criteria, and actual participation in the evaluative process?

6. What are the relationships between the organizational and administrative characteristics of the academic libraries and the levels of participation in evaluation? How do these characteristics relate to the attitudes of academic library administrators toward evaluation?

The research survey involved one instrument designed by the researcher. The items composing the questionnaire were based upon the literature review for this study to obtain information relating to the following major areas of research concern:

1. *Management information* — Included were questions designed to determine the extent to which libraries evaluate services, what services are being evaluated, and what types of evaluations are being used.

2. *Perception of evaluation information* — Included were statements describing evaluation of academic library services placed on a Likert-type scale to allow the respondent to indicate agreement or disagreement with the statements.

3. *Evaluation guidelines information* — Included were factors considered by library administrators to be important as meaningful criteria for evaluating the effectiveness of academic library services. A Likert-type format enabled the respondent to indicate the degree of importance of each factor.

4. *General information* — Included were questions relating to the distinguishing characteristics of academic libraries which do or do not evaluate library services (e.g., size of collection, size of library staff, size of student population, public, independent, or church-related institution). This information was used to define subgroups for comparison and analysis.

The population from which the sample for the study was drawn consisted of the chief administrative officers of 734 academic libraries whose institutions are accredited by the Southern Association of Colleges and Schools (SACS) and are listed in the member directory of the association. A random sample of 417 was selected from this group using a computer-generated table of random numbers.

A pilot study was used to test the preliminary draft of the instrument. Revised questionnaires were sent to each of the chief administrative officers in the random sample of SACS institution libraries in September 1985. From the sample population of 417, 348 responses were received for a return rate of 83.45 percent. Of the 348 responses, 325 were usable for analysis, a valid response rate of 77.94 percent.

Several aspects stand out as important in the results of this study. First, as indicated in Figure

FIGURE 1.

Library Services Evaluated Most and Least Regularly, by Library Services Area

O Designates most regularly evaluated.
X Designates least regularly evaluated.

Catalog
O Observe catalog use unobtrusively.
X Monitor computerized catalog use statistics.

Reference Service
O Observe reference staff performance unobtrusively.
X Study reference staff performance using a test set of questions.

Collection
O Compare collection against recognized bibliographies.
X Examination of collection by subject specialists who assess the adequacy of the collection.

Materials Use
O Maintain statistics on circulation of materials outside the library.
X Test document delivery success rate by use of Document Delivery Test (DDT).

Bibliographic Instruction
O Survey patrons on bibliographic instruction (how well it is presented, how important it is to patrons, what can be done to improve it, etc.).
X Measure effectiveness of bibliographic instruction by a pre- and post-test study.

Physical Facilities
O Study facilities use (physical arrangement of materials, service points, furniture, equipment, etc.).
X Survey patrons on their evaluation of surroundings (environmental climate, attractiveness, etc.)

Patron Use
O Compare hours of service with those of similar libraries.
X Measure average time patrons spend in the library.

User Needs/Satisfaction
O Analyze feedback from library committee or academic department liaison.
X Request diary-keeping of a sample of library users, describing library services needs/use.

Online Bibliographic Searching and Information Retrieval
O Maintain use statistics of online searching.
X Study search performance by comparing a search against "standard" searches conducted solely for the purpose of evaluation.

1, traditional quantitative activities dominate the limited evaluation programs being performed in the responding academic libraries, with few reporting less traditional evaluation activities suggested in the literature. Administrators apparently participate in less complex, easily collected statistical measures with little user involvement. There was strong agreement among institutions about the evaluation activities in which they do and do not participate.

Second, an overwhelming level of agreement exists for support of evaluation as an essential activity, even if the administrators do not participate extensively in evaluation (see Figure 2). Academic library administrators indicate that evaluation techniques are available and acceptable to librarians, that the profession is mature enough, and that there is sufficient commitment to formulate methods for evaluation. Their enthusiasm is restrained, however, by the lack of reward by their institutional administrations.

Figure 3 shows that strong agreement also exists on the importance of evaluative criteria with unanimity among all library levels on the most and least important criteria for evaluating academic library services. One interesting aspect of the study is the fact that the most important evaluative criteria are reflected in the least often reported evaluation activities and the presence of

. . . the most important evaluative criteria are reflected in the least often reported evaluation activities . . .

the least important criteria in activities in which academic libraries most often participate.

Finally, there was high positive correlation, a meaningful relationship, indicated among attitudes of the responding administrators toward evaluation, their perceived importance of evaluative criteria, and actual participation in evaluation. It appears that those academic libraries directed by administrators who indicate a positive attitude toward evaluation and evaluative criteria also participate in more evaluation activities. In addition, most participation occurs in academic libraries of medium size and budget, whose institutions are public and confer only bachelor's and master's degrees. Interestingly, those libraries with more automated functions participate in more evaluation activities, suggesting that library automation technology could be used to produce evaluative information, as well as to provide an efficient delivery system for organizing and reporting this information, assuring better service to library patrons.

Speculatively, as far as evaluation of academic library services is concerned, bigger is not necessarily better. Larger institutions may find difficulty in initiating programs of qualitative evaluation while small schools may be more able to maintain

FIGURE 2.

Academic Library Administrators' Attitudes Toward the Evaluation of Library Services

Agreed Most Often (in rank order):

1. The evaluation of library services is an essential activity.
2. The library profession is mature enough to formulate valid evaluation methods.
3. Imperfect measures can be useful if their limitations are appreciated.
4. To obtain useful administrative information, libraries should not hire highly trained outside evaluators to evaluate library services.
5. Evaluation techniques are available.
6. The use of non-threatening measures, such as standard bibliographies and quantitative numbers in statistical reports, are acceptable to the library staff.
7. Evaluation of library services is not over-emphasized today and counter-productive to the true mission of library services.
8. Library services are not a complex bundle of intangibles not amenable to evaluation.
9. The library staff does not resist library service evaluation.
10. Formula for evaluation are not too complicated for the mathematically uninitiated.

Agreed Least Often (in rank order):

1. Evaluation of library services is extremely threatening to the library profession.
2. Each library is not unique and should not be assessed in the context of its own particular history, constraints, uses, and environment.
3. The subjective judgment of library professionals should not be respected.
4. General professional consensus of the library profession is not necessary to achieve a commitment to evaluate library services.
5. Academic library administrators have been in the dark ages far too long by failing to recognize the critical importance of evaluation.
6. There are rewards from my institution for such a management approach.
7. Libraries are no more varied than other organizations where tools of management science have been applied profitably.
8. Evaluation is a high level of concern in my institution.
9. The difficulties in formulating universally applicable measures for evaluation are not seemingly insurmountable.
10. Evaluation should be the library manager's watchword.

FIGURE 3.

Perceptions of Academic Library Administrators of the Importance of Evaluative Criteria

Most Important (in rank order):

1. The adequacy of the collection in supporting curricular needs.
2. Interpersonal communication skills of the members of the library staff.
3. The ability of the reference staff to answer questions completely and accurately.
4. The maintenance of the collection and indexes in an orderly arrangement.
5. The ability of the catalog and shelf arrangement to disclose the holdings of particular items or materials on particular subjects.
6. Job satisfaction of the members of the library staff.
7. The maintenance of adequate hours of access and professional staff assistance.
8. The provision of comfortable, attractive, quiet, well-equipped facilities.
9. The ability of the bibliographic instruction program to improve effective patron use of the library.
10. The provision of loan policies of optimal opportunity for students and faculty.

Least Important (in rank order):

1. The comparison of the collection against holdings of other institutions.
2. The maintenance of reference assistance statistics by counting and classifying inquiries.
3. The maintenance of statistics for circulation of materials within the library.
4. The maintenance of statistics on the number of patrons who use the library.
5. The speed with which a literature search can be conducted.
6. The comparison of collection size with accepted standards.
7. The comparison of seating and stacks facilities with accepted standards.
8. The speed with which a reference inquiry can be answered.
9. The maintenance of statistics for circulation of materials outside the library.
10. The adequacy of the collection in supporting faculty research needs.

. . . those academic libraries directed by administrators who indicate a positive attitude toward evaluation and evaluative criteria also participate in more evaluation activities.

patron-oriented public services and evaluation activities.

A review of evaluation literature indicates that complex and dynamic criteria have been introduced for the qualitative evaluation of library services in a seemingly endless list. The identification of acceptable measures, however, has proven extremely difficult. The criteria presented in the literature may be too complex to be useful, an obstacle to its value to managers. It appears that the criteria selected as a result of this research synthesize prior theory and information, combining these with the expressed preferences of the responding administrators. The resulting structure could be of value as the library profession moves toward the adoption of an evaluation program acceptable to academic library administrators.

The following evaluative criteria, selected by the responding academic library administrators in this study as the twelve most important criteria for evaluating the effectiveness of academic library services, are suggested as guidelines for formulating appropriate evaluative criteria. Listed with the guidelines/criteria are examples of suitable evaluation activities for gathering the pertinent information needed for evaluation.

FIGURE 4.

Suggested Criteria for Evaluating the Effectiveness of Academic Library Services with Evaluation Activities

1. The adequacy of the collection in supporting curricular needs: (a) study distribution of funds for collection by formula for individual subject fields, (b) examination of collection by subject specialists who assess the adequacy of the collections, (c) analyze feedback from library committee of academic department liaison.

2. Interpersonal communication skills of the members of the library staff: (a) survey patrons on their evaluation of the personal assistance available for finding information.

3. The ability of the reference staff to answer questions completely and accurately: (a) maintain statistics on proportion of questions answered correctly, and (b) study performance of reference staff using a test set of questions.

4. The maintenance of the collection and indexes in an orderly arrangement: (a) survey patrons on their use of the catalog as an information finding tool, and (b) study materials accessibility (difficult or delay in obtaining materials).

5. The ability of the catalog and shelf arrangement to disclose the holdings of particular it ems of materials on particular subjects: (a) same as 4a and (b) same as 4b.

6. Job satisfaction of the members of the library staff: (a) survey staff members on the extent of their satisfaction with their positions as related to promotion, personal growth, salary, duties, etc.

7. The maintenance of adequate hours of access and professional staff assistance: (a) compare hours of service with those of similar libraries, and (b) analyze reference use patterns.

8. The provision of comfortable, attractive, quiet, well-equipped facilities: (a) study facilities use (physical arrangement opf materials, service points, furniture, equipment, etc.); (b) analyze use of space for stacks and seating by comparison with accepted standards; and (c) survey patrons on their evaluation of surroundings (environmental climate, attractiveness, etc.).

9. The ability of the bibliographic instruction program to improve effective patron use of the library: (a) measure effectiveness of bibliographic instruction by a pre- and post-test study; and (b) survey patrons on bibliographic instruction (how well it is presented, how important it is to patrons, what can be done to improve it, etc.).

10. The provision of loan policies of optimal opportunity for students and faculty: (a) analysis of circulation records, and (b) analysis of borrowing policy/privileges.

11. The ability of the online bibliographic searching staff to retrieve relevant citations/items: (a) request user to indicate which retrieved citations/items are relevant, and (b) survey patrons on their use of the online search service to find information.

12. The ability of the interlibrary loan service to meet user needs satisfactorily in a reasonable length of time: (a) analyze proportion of interlibrary loan requests satisfied, and (b) assess time required to satisfy interlibrary loan requests.

Previous studies underscore the ability to measure library effectiveness and the benefits of qualitative measurement methods. Research efforts have provided tools and methods for actual decision making on measurement and evaluation of effectiveness. No national standards have been set, however, and there seems to be no move toward general professional consensus on measurement and evaluation of effectiveness. Library administrators must explore all the possibilities for a satisfactory tool to support, with more than partial facts and figures, the previously intangible worth, benefits, and effectiveness of libraries. It will also be necessary for the library profession to renew and affirm a commitment to and enthusiasm for the goal of truly effective library service, strengthening its resolve to meet that challenge.

The true success of libraries must be measured by the services delivered to patrons. The ultimate purpose of our libraries is to provide information services. Evaluation can be a means to that end.

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S. R. Reed, "Introduction." *Library Trends* 22(1974):253-55.

P. V. Rzasa, *The Development of Measures of Effectiveness for a University Library.* Unpublished master's thesis, Purdue University, 1969.

P. V. Rzasa, and N. Baker. "Measures of Effectiveness for a University Library." *Journal of the American Society for Information Science* 23(1972):248-53.

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"Standards for College Libraries." *College and Research Libraries News* 47(1986):189-200.

"Standards for College Libraries." *College and Research Libraries News* 40(1979):101-10.

R. W. Swanson, "Design and Evaluation of Information Systems." In *Annual Review of Information Science and Technology,* edited by C. A. Cuadra. Washington: American Society for Information Science, 1975.

J. C. Virgo, and D. A. Yuro. *Libraries and Accreditation in Institutions of Higher Education.* New York: Association of College and Research Libraries, 1981.

Upcoming Issues

Winter 1990	- Supporting the Support Staff *Harry Tuchmayer, Guest Editor*
Spring 1991	- Law and the Library *Tim Coggins, Guest Editor*
Summer 1991	- Young Adult Services *Rebecca Taylor and Gayle Keresey, Guest Editors*
Fall 1991	- Library Buildings *Phil Barton and John Welch, Guest Editors*
Winter 1991	- Conference Issue
Spring 1992	- Anniversary Issue: History of Libraries in N.C. *Robert Anthony, Guest Editor*
Summer 1992	- Librarians and the Political Process *Nancy Bates, Guest Editor*
Fall 1992	- Telecommunications *Bil Stahl, Guest Editor*
Winter 1992	- Preservation of Popular Culture *Alice Cotten, Guest Editor*
Spring 1993	- Ethics in Librarianship *Marti Smith, Guest Editor*
Summer 1993	- Children's Services *Satia Orange and Cal Shepard, Guest Editors*
Fall 1993	- Social Issues in Librarianship *Jane Moore, Guest Editor*
Winter 1993	- Conference Issue

Unsolicited articles dealing with the above themes or any issue of interest to North Carolina librarians are welcomed. Please follow manuscript guidelines delineated elsewhere in this issue.

Instructions for the Preparation of Manuscripts for *North Carolina Libraries*

1. *North Carolina Libraries* seeks to publish articles, book reviews, and news of professional interest to librarians in North Carolina. Articles need not be of a scholarly nature, but they should address professional concerns of the library community in the state.
2. Manuscripts should be directed to Frances B. Bradburn, Editor, *North Carolina Libraries,* Joyner Library, East Carolina University, Greenville, N.C. 27858.
   N.C. 27604.
3. Manuscripts should be submitted in triplicate on plain white paper measuring 8½" x 11".
4. Manuscripts must be double-spaced (text, references, and footnotes). Manuscripts should be typed on sixty-space lines, twenty-five lines to a page. The beginnings of paragraphs should be indented eight spaces. Lengthy quotes should be avoided. When used, they should be indented on both margins.
5. The name, position, and professional address of the author should appear in the bottom left-hand corner of a separate title page.
6. Each page after the first should be numbered consecutively at the top right-hand corner and carry the author's last name at the upper left-hand corner.
7. Footnotes should appear at the end of the manuscript. The editors will refer to *The Chicago Manual of Style,* 13th edition. The basic forms for books and journals are as follows:
   Keyes Metcalf, *Planning Academic and Research Library Buildings.* (New York: McGraw, 1965), *416.*
   Susan K. Martin, "The Care and Feeding of the MARC Format," *American Libraries* 10 (September 1979): 498.
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Issue deadlines are February 10, May 10, August 10, and November 10.

Selective Bibliography on Library Performance Measures

Cynthia R. Levine

This selective bibliography is designed to provide a sampling of the vast literature on measures of library effectiveness. This broad topic includes writings on performance measures, output measures, library effectiveness, cost-effectiveness, and library statistics. The subject is closely related to library goals and objectives, against which library effectiveness is often measured. Because of the wide-ranging nature of the topic, a comprehensive bibliography is not feasible. I have chosen to concentrate on the reasons for measuring library effectiveness, specific ways in which it can be done, and how measures have been used in particular types of libraries and for particular services. Note that these categories are not mutually exclusive, thus many of the writings can fall in more than one area. I have also chosen to restrict the bibliography to relatively contemporary writings. With few exceptions, the items included were published in the 1980s.

Review Articles

These two recent review articles provide introductions to the research on performance measurement, showing the development of the topic over time. For additional information on earlier research, see Evans et al. (1972) listed in the "Methods of Analysis" section of this bibliography.

Deborah L. Goodall, "Performance Measurement: A Historical Perspective." *Journal of Librarianship* 20 (April 1988): 128-45.

Nancy A. Van House, "Output Measures in Libraries." *Library Trends* 38 (Fall 1989): 268-97.

Using Performance Measures for Management Decisions

Performance measures are not made in a vacuum. The writings by Blagden (1980), DuMont (1980) and Orr (1973) discuss the rationale for performance measurement by showing how they may be used by library managers to assist in making decisions and in justifying those decisions. The articles by Allen (1985), Christensen (1988), and Hernon (1989) discuss the collection and uses of statistics. Young (1989) gives an overview of library statistics compiled by federal and state governments as well as by library associations and organizations.

General Introductions

John Blagden, *Do We Really Need Libraries?* New York: Clive Bingley, 1980.

Rosemary Ruhig DuMont, "A Conceptual Basis for Library Effectiveness." *College & Research Libraries* (March 1980): 103-11.

Stuart Hannabus, "The Importance of Performance Measures." *Library Review* (Winter 1987): 248-53.

R. H. Orr, "Measuring the Goodness of Library Services: A General Framework for Considering Quantitative Measures." *Journal of Documentation* 29 (September 1973): 315-32.

Library Statistics

Geoffrey G. Allen, "The Management Use of Library Statistics." *IFLA Journal* 11 (1985): 211-17.

John O. Christensen, "Use of Statistics by Librarians." *Journal of Library Administration* 9, no. 2 (1988): 85-90.

Martin M.Cummings, "Cost Analysis: Methods and Realities." *Library Administration & Management* 3 (Fall 1989): 181-83.

Peter Hernon, "Research and the Use of Statistics for Library Decision Making." *Library Administration & Management* 3 (Fall 1989): 176-80.

Peter R. Young,"U.S. Library Statistics." *Library Administration & Management* (Fall 1989): 170-75.

Methods of Analysis

This section covers specific techniques that have been used to measure library effectiveness. The "Overviews" include general discussions of a variety of measures. The "Specific Measures"

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section lists studies of specific ways to measure availability of materials and the degree to which users are able to locate and gain access to them and to satisfy their information needs. Note that the articles by D'Elia (1985 and 1988) and Van House (1988) were written in response to one another and, by reading them in sequence, you can follow the debate on the usefulness of a particular measure called "fill rates."

Overviews

Rosemary Ruhig Du Mont, and Paul F. Du Mont, "Measuring Library Effectiveness: A Review and Assessment." *Advances in Librarianship* 9 (1979): 103-41.

Edward Evans, Harold Borko, and Patricia Ferguson, "Review of Criteria Used to Measure Library Effectiveness." *Bulletin of the Medical Library Association* 60 (January 1972): 102-10.

Philip M. Morse, *Library Effectiveness: A Systems Approach.* Cambridge, Mass.: MIT Press, 1968.

F. W. Lancaster, *If You Want to Evaluate Your Library.* Champaign, Ill.: Graduate School of Library and Information Science, University of Illinois, 1988.

G. Travis White, "Quantitative Measures of Library Effectiveness." *Journal of Academic Librarianship* 3 (July 1977): 128-36.

Specific Measures

Thompson R. Cummins, "Demand Analysis: Inputs, Outputs, Outcomes, and Productivity." *Public Libraries* 27 (Spring 1988): 10-13.

George D'Elia, "Materials Availability Fill Rates — Useful Measures of Library Performance?" *Public Libraries* 24 (Fall 1985): 106-10.

——, "Materials Availability Fill Rates: Additional Data Addressing the Question of the Usefulness of the Measures." *Public Libraries* 27 (Spring 1988): 15-23.

——, "A Response to Van House." *Public Libraries* 27 (Spring 1988): 28-31.

George D'Elia and Sandra Walsh, "User Satisfaction With Library Service: A Measure of Public Library Performance." *Library Quarterly* 53 (April 1983): 109-33.

Frederick G. Kilgour, "Toward 100 Percent Availability." *Library Journal* (November 1989): 50-53.

D. H. Revill, " 'Availability' as a Performance Measure for Academic Libraries." *Journal of Librarianship* 19 (January 1987): 14-30.

Gene K. Rinkel, and Patricia McCandless. "Application of a Methodology Analyzing User Frustration." *College & Research Libraries* (January 1983): 29-37.

W. M. Shaw Saracevic, and P. B. Kantor. "Causes and Dynamics of User Frustration in an Academic Library." *College & Research Libraries* 38 (January 1977): 7-18.

Nancy A. Van House, "In Defense of Fill Rates." *Public Libraries* 27 (Spring 1988): 25-27.

——, "A Response to D'Elia." *Public Libraries* 27 (Spring 1988): 32.

Public Libraries

Much of the work on output measures has focused on public libraries. Several manuals have been developed to aid public libraries, and these have inspired much of the discussion on the general topic of output measures. Lynch (1983) compares two of these publications, *Performance Measures for Public Libraries* (1973) and *Output Measures for Public Libraries* (1982). A second edition of *Output Measures for Public Libraries* was published in 1987. Childers and Van House (1989) show the multifaceted nature of library effectiveness by identifying sixty-one distinct indicators that can be classed into eight separate dimensions. They point out that procedures have not been developed to measure many of the most important of each indicators.

Manuals

Ernest DeProspo, et al. *Performance Measures for Public Libraries.* Chicago: American Library Association, 1973.

Nancy A. Van House, et al. *Output Measures for Public Libraries: A Manual of Standardized Procedures.* 2d ed. Chicago: American Library Association, 1987.

Douglas Zweizig, and Eleanor Jo Rodger. *Output Measures for Public Libraries.* Chicago: American Library Association, 1982.

Discussion

Thomas Childers, and Nancy Van House. "The Grail of Goodness: The Effective Public Library." *Library Journal* 14 (Oct. 1, 1989): 44-49.

Mary Jo Lynch, "Measurement of Public Library Activity: The Search for Practical Methods." *Wilson Library Bulletin* (January 1983): 388-93.

Charles R. McClure, et al., "Output Measures: Myths, Realities, and Prospects." *Public Libraries* (Summer 1986): 49-52.

Jane Robbins, and Douglas Zweizig. *Are We There Yet? Evaluating Library Collections, Reference Services, Programs, and Personnel.* Madison, Wis.: School of Library and Information Studies, University of Wisconsin, 1988.

Terry L. Weech, "Validity and Comparability of Public Library Data: A Commentary on the Output Measures for Public Libraries." *Public Library Quarterly* 8 (1988): 7-18.

Academic and Research Libraries

Kantor (1984) provides academic libraries with a practical manual demonstrating a series of measures appropriate for evaluating academic and research libraries. A new manual by Van House et al. was published in summer 1990 and is discussed in Tiefel (1989). The article by McClure shows one of the difficulties in conducting these measures: skepticism on the part of library staff regarding the validity and uses of performance measures.

Manuals

Paul B. Kantor, *Objective Performance Measures for Academic and Research Libraries.* Washington, D.C.: Association of Research Libraries, 1984.

Nancy A. Van House, et al. *Measuring Academic Library Performance: A Practical Approach.* Chicago: American Library Association, 1990.

Discussion

Mary J. Cronin, *Performance Measurement for Public Services in Academic and Research Libraries.* Washington, D.C.: Association of Research Libraries, 1985.

Charles R. McClure, "A View from the Trenches: Costing and Performance Measures for Academic Library Services." *College & Research Libraries* 47 (July 1986): 323-36.

Virginia Tiefel, "Output or Performance Measures: The Making of a Manual." *College & Research Libraries News* 50 (June 1989): 475-78.

School Libraries

Evelyn H. Daniel, "Performance Measures for School Librarians: Complexities and Potential." *Advances in Librarianship* 6 (1976): 1-51.

Special Libraries

The following article stresses the importance of evaluating corporate libraries and recommends modifying public library measures for this purpose.

Charles R. McClure, and Betsy Reifsynder. "Performance Measures for Corporate Information Centers." *Special Libraries* 75 (July 1984): 193-204.

Reference Services

Evaluating reference services produces special challenges because many aspects of reference are difficult or inappropriate to quantify. These issues are discussed in the sources listed below.

Peter Hernon, "Utility Measures, Not Performance Measures, for Library Reference Service?" *RQ* 26 (Summer 1987): 449-59.

Peter Hernon, and Charles R. McClure. *Unobtrusive Testing and Library Reference Service.* Norwood, N.J.: Ablex, 1987.

Bill Katz, and Ruth A. Fraley. *Evaluation of Reference Services.* New York: Haworth Press, 1984. Also published as *The Reference Librarian* 11 (Fall/Winter 1984).

Ronald R. Powell, "Reference Effectiveness: A Review of Research." *Library and Information Science Research* (1984): 4-19.

Interlibrary Loan

Thomas J. Waldhart, "Performance Evaluation of Interlibrary Loan in the United States: A Review of Research." *Library & Information Science Research* 7 (1985): 313-31.

Cataloging

Measurement in the area of cataloging has focused on two areas, cataloging costs and the relationship between quality and quantity. The best introduction to this topic is Mandel (1988).

George Harris, "Historic Cataloging Costs." *Library Quarterly* 59 (January 1989): 1-21.

Carol A. Mandel, "Trade-offs: Quantifying Quality in Library Technical Services." *Journal of Academic Librarianship* 14 (September 1988): 214-20.

Richard Reeb, "A Quantitative Method for Evaluating the Quality of Cataloging." *Cataloging and Classification Quarterly* 5 (Winter 1984): 21-26.

Counterpoint

(Continued from page 219)

age each and every one of us to care enough about the job we do to do it well. You can't mandate exceptional performance, but you can achieve it with a lot of hard work and a commitment to excellence. You don't get that commitment with good performance measures, you get it with good management skills.

POINT/

Performance Measures: The Pursuit of Excellence and Accountability

Jerry A. Thrasher

Did the computer system maintain your expected response time during the performance test? Which airline has the best on-time arrival record? Which stock has the best earnings ratio? Performance measures are used universally to make decisions and evaluations. This is true in one's personal and business life. Why should it be any different in public institutions like libraries?

If you don't have goals or specific objectives, how do you know if you have accomplished the job or if you have even gone in the right direction? And if you don't have performance evaluations, how do you know you are doing a good job? Performance measures are an excellent tool to determine how you are doing.

It is also important to remember that we are all accountable to someone. We are hired to perform a particular job and to do that job satisfactorily or better. How do we know when we are performing well? When our co-workers notice, when our boss tells us, or when we can prove it? All are important, but the latter gives substance to the former and are helpful to both the supervisor and the employee.

Acceptable measures should be explored and tested within your library. Although they may not have been in writing, staff performance measures have always existed. How long should it take to shelve a full book truck in the adult nonfiction collection? How long does it take to catalog and process a book truck of new best sellers? Such measures go a long way in improving performance and letting staff know what is expected.

Benchmarks can be established based on experience and through a process of joint exploration. Having realistic performance measures is far better than relying on a supervisor's whim. If performance measures do not exist, both the employee and the supervisor should work together as a team to establish them. Supervisors should keep in mind that the excellent employee who has been doing this job for five years will have a different performance level than an employee who has just been hired. The level of performance will be less and may never reach the current level of expectation.

At another level, the process of developing performance measures can also help the supervisor justify requests for additional staff, equipment and other resources. A manager needs reliable information to justify budget requests to help staff serve their library constituency better. I believe that the more quantified that information is, the greater the likelihood of obtaining increased funding. If funding is not forthcoming, then the information is also available to reevaluate existing functions or services that need to be modified or dropped to live within your approved budget. If you can get increased performance from your staff and increased funding from your host organization without some form of performance or workload measure, more power to you. I would like to know what you are doing.

If you feel your employees can offer the library and their community more, or you are not getting the level of funding you think you should, performance and workload measures may be able to help. But they will only help if it is a cooperative effort between staff and management to reach the library's mission and/or goals.

In any case, pursuing the process will generate important data to demonstrate that you are doing a good job with the resources allocated to the library. The pursuit of meaningful performance measures is also the pursuit of excellence and accountability.

Jerry A. Thrasher, former North Carolina Library Association SELA Representative, is the Library Director for the Cumberland County Public Library & Information Center in Fayetteville.

COUNTERPOINT

Performance Measures Can't Quantify Quality

Harry Tuchmayer

Do performance measures really work or are they just another obstacle dreamed up by administrators to make your life more difficult? After all, you were hired to do a good job in a professional manner, so why does your boss insist on holding you and your entire department up to some abstract standard barely obtainable? Sound familiar? It should, because it speaks to the underlying problems with performance measures — mistrust and misunderstanding.

Staff, whether professional or support, fear standards. Now don't get me wrong, that doesn't mean that they aren't interested in doing a good job. They are! They just know that the "real reason" we set standards is to document poor performance, not to reward good performance. So what exactly are administrators really after when they attempt to measure performance? Are they setting realistic objectives for each department for the coming year? Are they attempting to document performance of individual employees for the purpose of evaluation? Are they really just measuring the level of activity in the library in order to justify next year's budget request? Your answers to these questions have a lot to do with how receptive you are to performance measures. The fact of the matter is, staff mistrust standards because they don't understand how they will be used; they fear output measures because they don't understand why such statistics are collected.

Does this mean that performance measures are a waste of time? Perhaps not. Knowing how many carts can be shelved in an hour, how many books can be cataloged or processed in a month and how many bibliographies should be produced this year can help supervisors and employees set appropriate goals. However — and this is the difficult part — they need to be realistic and flexible benchmarks that encourage performance rather than create fear in the workplace. All too often administrators establish measures in a vacuum, handing down goals and objectives as if they were dictated levels of achievement that each department is expected to meet. Instead of involving the individual employee in the process of measuring output for the purposes of establishing objectives, the instrument and its results are handed over to the immediate supervisor as a *fait accompli* ready to be adopted and acted upon. Performance measures must be developed and standards set by administrators, supervisors and staff if they are to have any value to the organization. Otherwise, you run the risk of creating an environment where individuals do what's expected of them, and no more. Thus, instead of setting standards for excellence you've created a cop-out for mediocrity.

All this is perhaps easier said than done. Structuring output measures that work takes time. They require a commitment on the part of everyone involved to honestly evaluate what can be done and how it can be achieved. It takes a willingness on the part of administrators to accept staff input and an acceptance on the part of staff that administrators really do have their best interests at heart. In the end, it takes a certain degree of trust that the objective is to improve service, not to penalize staff. Only in an environment of mutual trust and understanding can we even begin to address why we need performance measures.

So why do we need performance measures? Is it to determine which is the best library in the state or to encourage each of us to make our libraries even better than they already are? Is it to give administrators something to do in their office, or is it to help create a process of communication between administrators and their staff? Is it to prove something to the rest of the library world, or to prove something to ourselves?

We don't really need performance measures. Instead we should be working on ways to encour-

(Continued on page 217)

Harry Tuchmayer, the editor of Point/Counterpoint, is Headquarters Librarian for the New Hanover County Public Library in Wilmington.

Library Research in North Carolina

Jinny Y. Davis, editor

One source of library scholarship in North Carolina is the master's paper required at the three accredited library schools at the University of North Carolina at Chapel Hill, North Carolina Central University, and the University of North Carolina at Greensboro. While the master's paper generally does not approach the doctoral dissertation in the level of research skill required or the scope of the topic, completing such a project does instill in the student an understanding of what it means to conceive, research, execute, and document a research project.

Even a quick glance at the lists of master's papers written at these three institutions reveals the wealth of potential topics for further research. A large number of these papers also use libraries in North Carolina as their laboratories for study. Once written, however, most master's papers languish unpublicized at their library schools.

The purpose of this column is to draw attention to master's papers that are worthy of wider attention — papers that were identified by the library faculty at UNC-Chapel Hill and at NCCU as meritorious pieces of scholarship. At UNC-Greensboro, Dr. Marilyn Miller reports that the faculty is restructuring the master's paper process. By requiring a research methodologies course that is closely tied to the writing of a master's paper, they hope to improve the research skills of their students and the quality of the papers produced.

UNC-Chapel Hill's School of Information and Library Science has recognized outstanding master's papers since 1977, when, by a gift of the Rockwell Fund, Dr. Edward Holley was able to establish the Dean's Achievement Award for the best master's paper in any one year. Winners of the award receive a $100 check and formal recognition in the University's commencement program. Members of the library faculty nominate notable papers, and a faculty committee selects the winners. In the eighties, the award was split into two categories, with winners designated for both a best "general" paper (usually on some area of traditional librarianship), and a best "technical" paper (usually on a topic in the area of information science). Although many M.L.S. graduates have published works based on their master's papers, no comprehensive attempt has been made to keep track of all subsequent publications.

Winners of the Dean's Achievement Award over the last five years, and the titles of their papers, are listed below.

1990 Nan Marie McMurray. *Sufficiently Ornate: Librarians and Library Architecture, 1876-1900.*
Andrea Louise Rohrbacher. *Monitoring Adverse Drug Reaction Reports Using Commercial Medical Databases.*

1989 Joel Brett Sutton. *MIRA: A Prolog-Based System for Musical Information Retrieval and Analysis.*

Paul Staley Williford. *Study in Gray: Information Needs among Older Adults in Shelby County, Tenn.*

1988 Leslie Carol McCall. *Organization of Musical Pedagogical Materials.*

Daniel Gordon Wheeler. *Investments in Brittle Books.*

1987 S. Diane Shaw. *A Study of the Collaboration between the Scholar Erasmus of Rotterdam and His Printer Froben at Basel during the Years 1514 to 1527.*

Deborah K. Barreau. *Automated Reserves System for a Special Library.*

1986 Susan Elizabeth Bello. *A History of Plans for Cooperative Preservation Efforts Involving Academic Libraries.*

James Timothy Shaw. *Personal Narratives as Sources for the History of the Spanish Civil War.*

David Anthony Day. *An Automated Bibliographic System for 19th-Century Opera Librettos.*

At NCCU's School of Library and Information Sciences, Dean Benjamin Speller reports that the faculty has awarded an Outstanding Research Award since 1976. Winning master's papers are selected for the significance of their topic and the execution of the research methodology. Although no financial stipend is attached, the winners are recognized at a university-wide award day in the spring. NCCU does track publications by its graduates and reports twenty-five articles or papers published in the professional literature by its M.L.S. graduates since the late seventies.

Award-winning master's papers at NCCU over the last five years were:

1990 Christopher D. Forney. *The Acquired Immune Deficiency Syndrome: A Bibliometric Analysis: 1980-1984.*

1989 Elizabeth Janet Gardner. *A Study on the Existence of Library Materials Reconsideration Policies and Procedures in Public School Systems of North Carolina.*

1988 Margaret P. Brill. *Government Documents as Bibliographic References in the Periodical Literature of International Relations: A Citation Analysis.*

1987 Desire E.Volkwijn. *Censorship in Schools: L. B. Woods Updated.*

1986 Susan G. Kundin. *A Comparison of the Treatment of Adolescent 'Problem-Concerns' in Formula Romance Fiction and Contemporary Realistic Fiction.*

All the works listed above are available via interlibrary loan. Readers interested in the topics or in seeing examples of good scholarship in North Carolina will want to take a look at them.

North Carolina Books

Robert G. Anthony, Jr., Compiler

Carolyn Sakowski. ***Touring the Western North Carolina Backroads.*** Winston-Salem, N.C.: John F. Blair, 1990. 305 pp. $14.95. ISBN 0-89587-077-0 (paper).

Ironically, the author's desire to promote an appreciation of the isolated beauty and the quaint communities that have survived highway development in western North Carolina will result in increased traffic by readers of her inspirational guide. Sakowski's great contribution to the bookshelf—if not the back seat of the car—is: 1) latching onto a rich concept; 2) applying an eye for delicious anecdote; and 3) delivering crisp prose. The problems with the book hardly tip the scales of an enthusiastic recommendation.

The tours require setting aside a whole day for each of twenty-one excursions, which range in length from twenty-one to 100 miles, many of which whiz by without authorial comment. The guide is best read first in an armchair, referring to simplified maps and noting opportunities to hike, picnic, play, and gape. Punctuated by explicit road directions, a fluid succession of stories play on important motifs: the mystery of nature as seen through Cherokee legends (drawn mostly from James Mooney); the exploitation of water, mineral, timber, and climate; and the horror and charm of pioneer ambition.

The better chapters have themes rather than lists of sites connected by roads. The tour of Haywood and Madison counties paints a picture of the old Buncombe Turnpike that lives up to the legend of "Bloody Madison," including century-old hearsay about a drover who tucked the bludgeoned body he found in his hotel room into his bed as a decoy to escape a murderous innkeeper. Sakowski makes effective use of quotations, adding to Madison's ambience with the WPA North Carolina guide's depiction of Marshall: "one mile long, one street wide, and sky high."

Sakowski ranges wide. In Marble, she recreates the cutter's experience; in Swain County, she reveals how Horace Kephart scientifically pinpointed his retreat to desolate wilderness; approaching Cullowhee, she stoops to reconstruct the life of a man who made a fortune transplanting goat glands into men desirous of potency. She popularizes remote material. In Avery County, she explains the ardor of eighteenth-century botanists by comparing competition among nations for unusual flora to the space race today.

The biggest disappointment is that she does not provide insight into the lay of the land—which is what one mostly sees—and that she misses opportunities to dramatize current ecological concerns. There is no mention of the effect of acid rain on the Fraser firs on Mount Mitchell, which has, among other things, created an otherworldly scene.

The text refers to further reading, such as Jules Verne's novel set at Table Rock, but the bibliography is hastily assembled. The Trail of Tears story intensifies a few chapters, but the bibliography does not include John Ehle's work of that name. An opportunity to enlarge upon geography is missed by not including Harry Moore's *A Roadside Guide to the Geology of the Great Smoky Mountains.* William Bartram is quoted, but his *Travels* is not cited. The bibliography is not organized thematically to present a usable reading list. An index and a list of helpful agencies are just adequate. The book's format is attractive; a wide left-hand margin provides space for subheadings and photographs, but the photographs are horribly small and dark.

Sakowski does not prove herself to be a painstaking scholar in this effort; however, she is a reliable traveler, a homegrown appreciator, and a wonderful storyteller. The bottom line is, she has produced a unique resource that will be demanded and cherished by residents of and visitors to the region.

Rob Neufeld, Asheville-Buncombe Library System

Catherine W. Bishir, Charlotte V. Brown, Carl R. Lounsbury, and Ernest H. Wood III. ***Architects and Builders in North Carolina: A History of the Practice of Building.*** Chapel Hill: University of North Carolina Press, 1990. 540 pp. $37.50. ISBN 0-8078-1898-4.

Histories of the practice of building, unlike histories of architecture, are relatively uncommon. Though related, there are important differences between the two genres. Histories of architecture tend to emphasize styles, significant buildings, and important architects. Histories of building practice are less concerned with what buildings look like, than with how they were built.

Perhaps the authors of ***Architects and Builders in North Carolina*** best summarize their book:

> "This book is about the people who built North Carolina's architecture. It describes how the practice of building changed from traditional craft to complex industry. Although there have been many studies of segments of the history of American building practice, this is the first work to look at the builders as a whole—artisan and architect, contractor and manufacturer, slave and free, rural and urban—and to trace the history of building practice from early settlement to the present.... And, although it suggests the outlines of the larger national picture of building practice, this is a story rooted in a single place—North Carolina—and a story that emerges directly from the personal sagas of hundreds of individuals laboring at thousands of building sites across this long-rural state." (Introduction.)

With copious quotations from contemporary documents, the authors of this important book present a comprehensive account of how buildings of all types came to be built in North Carolina. The relationships between client and builder, the effect of technology and improvements in transportation on the availability and cost of building materials, the skills, pay, and working conditions of white and black artisans are covered chronologically from a beginning chapter on construction practices of the seventeenth century to the final chapter on builders and architectural firms of the 1980s.

The scholarly apparatus is impressive. Fifty-six pages of notes and a twenty-nine page bibliography reveal the large number of manuscript and printed sources consulted. Extensive research was conducted in manuscript collections at Duke University, the University of North Carolina at Chapel Hill, and the North Carolina Division of Archives and History.

Catherine W. Bishir, director of the North Carolina Architecture Project of the Historic Preservation Foundation of North Carolina, has written a number of articles on North Carolina topics. Her book, *North Carolina Architecture*, will be published in November 1990. Charlotte V. Brown directs the visual arts program at North Carolina State University. Carl Lounsbury, an architectural historian with the Colonial Williamsburg Foundation, wrote his dissertation on changes in the building process in North Carolina in the nineteenth century. Ernest H. Wood writes on architectural subjects for *Southern Living*. Research assistance was provided by J. Marshall Bullock and William B. Bushong.

The book is well designed, with legible type, a conservative page layout, and sufficient margins for rebinding, should that become necessary. There are 155 illustrations, somewhat gray in reproduction but adequate for the purposes of this book.

Architects and Builders in North Carolina will be particularly valuable for architectural historians and for social and economic historians, both for specific facts and for its broad overview of building practice. General readers and students interested in architecture, the built environment, and North Carolina history will find it useful as well. It is strongly recommended for academic and public libraries.

Philip Rees, University of North Carolina at Chapel Hill

Gloree Rogers. ***Love, or a Reasonable Facsimile.*** Durham: Carolina Wren Press, 1989. 160 pp. $7.00. ISBN 0-932112-27-7 (paper).

Gloree Rogers's first novel is autobiographical, telling the story of a black girl growing up in North Carolina poor, handicapped, and trapped in damaging relationships.

The second of six children, Gloree is born in Bladen County with multiple birth defects, lacking pubic bone and vaginal opening, with her bladder out side her body, and with deformed legs. After numerous operations at Duke Hospital, the child learns to walk at age seven and is able to begin school, where the children make fun of her.

When Gloree is nine, her mother moves the family to Durham, where she lives with a succession of boy friends. Some of these men pity the little girl and are kind, but as she nears adolescence the men provoke her mother to beat her, and her life is constantly filled with violence. The neighborhood is no safer, as old Mr. Billy trades sacks of candy for sexual favors. "Ya ain't gonna tell nobody, is ya?"

After high school, Gloree moves to New York to work as a live-in maid. She becomes pregnant just months after having an operation to rebuild her vagina. Abandoned and jobless, she gives birth to a baby girl, then finds she has signed it over for adoption without realizing it. Recovering the baby, she moves back to Durham where she marries, divorces, has a series of painful relationships with abusive men, marries and divorces again, and continues the dismal cycle.

"I share the tragedies of my life in the hope that no living being will have to repeat these experiences except vicariously through the written word," writes Gloree Rogers. Yet the tragedies of cruelty, poverty, and ignorance are not ones that are easily escaped. Rogers's story rings true, and evokes in the reader strong emotions of outrage, pity, disgust, and hopelessness. The writing, however, is clumsy in places, with stiff dialogue, inconsistency of style, and a lack of character development. In spite of these flaws, the book received first place in the 1988 Carolina Wren-Obsidian II minority book contest for North Carolina.

This book is not about glorious achievements. It is about surviving, getting by, and settling, not for love, but a reasonable facsimile. It will be appropriate for academic collections in women's or black studies, and, in spite of the explicit sexual detail, for public libraries.

Lisa Dalton, Rockingham County Public Library

Chris Florance. ***Up From Mount Misery: The Blossoming of North Carolina's Sandhills.*** Asheboro, N.C.: Down Home Press, 1990. 211 pp. $19.95. ISBN 0-9624255-3-2.

On the founding of Southern Pines, N.C., circa 1884, newspaperman and former clerk of the North Carolina House of Representatives John D. Cameron described the quality of the land of the Sandhills in these words:

> There is no more barren or poverty-stricken belt in the state except Mount Misery near Wilmington, yet to this region Mr. Patrick has given the name of Southern Pines, a place where a pea vine will not grow and a grapevine cannot sprout. A sand bank where even the thinly scattered pine trees are stunted, where the wire grass stands in meager clumps, few and far between, and the white sand is marked with drifts of pine straw washed together by the summer floods that are not swallowed up by the thirsty desert.

This description was familiar to author Chris Florance, a former history teacher and ornamental horticulturist, who grew up in the area and graduated from Ellerbe High School in 1926. From personal knowledge as well as primary and secondary resources, Mrs. Florance tells the story of the arrival of a few wealthy and well-educated, mostly young, northerners in the early 1900s who saw both opportunity and potential in parts of an eight-county area called the Sandhills.

These visionary men bought and cleared land, built fine homes, planted crops, and started peach orchards. Because of their influence and minor success in their ventures, friends were encouraged to come. Community schools were established for their poorer neighbors, a legacy that reached beyond the area and that was more successful than their agricultural pursuits. The dreams and struggles of these men, shared eventually by the native population, gradually saw the blossoming of an area thought to be forever doomed because of its poor soil.

The book is divided into four parts, three of which bear the names of Roger Alden Derby, Morris Randolph Mitchell, and Frederick Taylor Gates, men who in the 1920s came to live and work in the Sandhills. All three were from prominent families who as individuals had been friends to or were relatives of such persons as Franklin D. Roosevelt, Grover Cleveland, Teddy Roosevelt, Walter Hines Page, Raphael Pumpelly, Dr. James Albert Broadus, Richard Loverling, and John D. Rockefeller.

Drawing heavily upon the unpublished memoirs (1935) of Roger Alden Derby, Mrs. Florance creates an interesting and at times intimate account of these men and their families, their relationships with and contributions to the people of the area, and their successes and failures as entrepreneurs. Interwoven into this historical account of the "County Families," the term used to describe this colony of northerners, are various personal stories and reflections that could only be put in proper context by a writer who knows her subject. One such account is that of the small farm family, the fictional Chases, where one can experience the life of a poor but proud Sandhills family of the early 1900s.

The last part of the book, "Sandhills Memorabilia," includes poems by Roger Derby, Clyde L. Davis, and Raphael W. Pumpelly II, and letters from prominent persons such as Walter Hines Page and Ethel Roosevelt Derby. These writings all deal with the physical characteristics of the area itself or with life in the region.

Complementing the text are well-chosen pictures of persons and places discussed. The style of the author makes the book very readable, and public and academic libraries will want to add it to their collections. The paper board binding, however, will not survive many circulations. The book should have much appeal to lovers of the Sandhills and would make an excellent gift for resident or visitor. Mrs. Florance has also authored the award-winning book, *Carolina Home Gardener* (UNC Press, 1976), now out of print.

Gary Fenton Barefoot, Mount Olive College

Daniel W. Patterson and Charles G. Zug III, eds. ***Arts in Earnest: North Carolina Folklife.*** Durham: Duke University Press, 1990. 319 pp. $42.50. ISBN 0-8223-0943-2 (cloth), $18.95. 0-8223-1021-X (paper).

> "The exploration of folklore, then, is not an antiquarian pursuit; it leads directly into earnest intellectual, social, and human issues." (p. 3).

This quotation from the introduction to ***Arts in Earnest*** gives the reader a hint of what is to come. If, like this reader, you have considered folklife studies merely the documenting of quaint stories and customs from the past, you are in for a surprise when you read this book. Mischief on the factory floor, house design, tall tales told by fraternity boys, the chant of the tobacco auctioneer, and the aesthetics of duck decoys are now fit subjects for contemporary North Carolina folklorists. All these topics are included in this volume, as are more traditional subjects such as quilt-making, storytelling, religion, and music.

All fifteen essays in ***Arts in Earnest*** are based on both fieldwork and library research. In each essay, the author attempts to go beyond simply describing a story or a practice to an examination of the meaning of the activity for the performer and his or her community. Several of the essays, particularly those on music, show the authors' training in other subject fields. The essay by Thomas Carter and Thomas Sauber on the New River Valley String Band may be difficult for those who are unable to read music, but all of the other essays are very accessible. Laurel Horton's article on quilts in antebellum Rowan County is a model of clarity, and the essay by Stephen Matchak on wildfowl decoys succinctly covers the social and economic history of the northeastern North Carolina coast while discussing the decoy tradition of the area. John Forrest's article complements Matchak's by revealing the aesthetics of decoys and the relation of aesthetic achievement to status among duck hunters. The book includes essays on both black and white folk culture, and covers all geographic regions of North Carolina.

The authors of the fifteen essays are former students in the Curriculum in Folklore at the University of North Carolina at Chapel Hill; the editors are faculty members in the program. The introduction by the editors provides an excellent review of the history of folklife studies. Most of the articles are illustrated, endnotes are included for all, and there is an index.

This is a scholarly book that can function as an introduction to modern folklife studies. It is also a readable volume that will be enjoyed by library patrons interested in North Caroliniana. Recommended for academic libraries and larger public and high school libraries.

Eileen McGrath, University of North Carolina at Chapel Hill

Reynolds Price. ***The Tongues of Angels.*** New York: Atheneum, 1990. 192 pp. $17.95. ISBN 0-689-12093-1.

In his recent autobiographical work *Clear Pictures*, Reynolds Price describes the flood of early memories retrieved during and following hypnotherapy sessions which were part of his treatment for spinal cancer. In Price's eighth novel, ***The Tongues of Angels,*** the reader feels that the author is sharing the memories and feelings of his younger self more directly than in any of his previous fiction.

The novel's narrator and protagonist, Bridge Boatner, is the artist that Price realized at a young age that he would never be. Bridge has a great deal to say about his philosophy of painting in this novel, and many of his comments can be equally well applied to the art of the novelist. Still closer to home, Bridge like Price lost his father at age twenty-one, and was left to be "the man at bat" in his family. This is not a new theme in Price's work: Milo Mustian of *A Generous Man* found himself in the same position, as did Kate Vaiden. Here, however, Price creates a young man with talents similar to his own, sets him down in his own lifetime, and gives him the same summer job that he held himself one year in the early 1950s—counselor at a boys' camp in the North Carolina mountains. As Bridge moves through that summer consciously seeking to bury his father and the memories of his own helplessness in the face of his father's death pains, any reader with similar memories is likely to feel that Price has written more autobiography than fiction here. Beyond these parallels, Price writes in *Clear Pictures* that the events in Bridge's summer are completely fictional.

Bridge's duties at Camp Juniper included teaching art classes, writing and editing the camp newsletter, and tending a cabin full of lively ten to twelve-year-old boys. Two important things happened to him that summer: he completed his first significant painting, "The Smoky Mountains as the Meaning of Things," and he made a friend and lost one in fourteen-year-old Raphael Noren, a veteran camper with extraordinary talents as an Indian dancer, and a tragic history.

"I'm as peaceful a man as you're likely to meet in America now," an older Bridge begins the narrative, "but this is about a death I may have caused." This opening sentence ensures the reader's attention to the very end of the story, but also sets up a letdown once he gets there. Bridge does not cause anyone's death by any stretch of the imagination. He fails to anticipate and direct an unforeseeable and uncontrollable event in another person's life, and with the pride of youth prefers to call himself guilty rather than helpless. Watchfulness, attention, looking at things and people in loving detail form the basis of Bridge Boatner's art as well as his faith; and when his young friend slips out of his sight, he faults himself.

Guilt, then, is a major theme of this novel, and it is echoed in Bridge's feelings about the Indian lore which forms much of the basis of camp life. The title suggests redemption, and signs of redemption abound throughout the book. Bridge reminds us that angels are messengers bringing news, and that Jesus taught that we are to watch for the messages. Angels are a favorite subject for his drawings and paintings, and he tells us that his first fame will come from a series of angel studies. He asks Rafe to pose for him, remembering with a shiver that Raphael was an archangel. He describes the boy Rafe as having "other-worldly looks," a "credible Angel Gabriel" who "enters a real room ten-foot square and greets the girl rising to meet him in the dim far corner, 'Hail Mary, full of grace!'" Rafe's message seems to come as he dances around the campfire, becoming the eagle he portrays as Bridge watches.

As much as he appreciates Rafe's gifts and message, Bridge has ambitions to be a messenger in his own right. Michelangelo and van Gogh, he says, "meant every picture as a forthright message, to change men's souls." He means the landscape he completes that summer in the same way, seeing a coded message that just barely eludes him in the rhythm of the mountainous panorama. It is while studying it that he feels he misses his chance to save Rafe.

One last allusion to angels comes in an almost parenthetical bow by Price to Thomas Wolfe. Bridge and a fellow counselor take a sort of pilgrimage to the Wolfe home in Asheville on a day off, and the impressionable Bridge nearly comes to the rescue of a forlorn young unwed mother who is in charge of the place.

Duke University professor Reynolds Price has written eight novels and several volumes of short stories over the last thirty years. He has created many memorable characters reacting to unusual, often overwhelming, circumstances in the midst of mundane surroundings. In this latest novel and in his autobiography, he has given his readers a great deal of himself. Recommended for school, public, and academic libraries.

Dorothy Hodder, New Hanover County Public Library

Other Publications of Interest

For students of the history of religion in the Tar Heel state, George W. Paschal's ***History of North Carolina Baptists*** is indispensable. This two-volume work [published 1930 (Vol. 1) and 1955 (Vol. 2)] provides a comprehensive examination of the Baptist presence in North Carolina, from arrival in the late seventeenth century through the mid-twentieth. By the Civil War, as Paschal explains, Baptists associated with the Baptist State Convention had become the largest denomination in the state, and members of that church have continued to play a major role in Tar Heel religious life. Long out of print, Paschal's study has recently been reprinted by Church History Research and Archives (220 Graystone Drive, Gallatin, Tenn. 30766) and is available for $54 (set). Included in the reprint volumes (601 pp., 578 pp.; hardback) are greatly expanded indexes, with more than sixteen thousand references to individuals, churches, and religion-related subjects. A list of additional church history and theology titles, some of which are offered at discounts to libraries, may be requested from the publisher.

Thomas Wolfe longed to be a playwright and applied his genius to writing for the stage early in his literary career. He is, however, best known for his long autobiographical novels. Yet some critics believe several of his short stories to be among his best work. Some of Wolfe's short fiction initially appeared in magazines and was later incorporated into his novels. In *From Death to Morning,* he collected fourteen stories. Others were drawn from his manuscripts and published posthumously. In ***The Complete Short Stories of Thomas Wolfe,*** editor Francis E. Skipp has gathered fifty-eight Wolfe stories, thirty-five not collected before and one published for the first time. This volume, first published in 1987, is now available in paperback (1989; Collier Books, Macmillan Publishing Co., 866 Third Avenue, New York, N.Y. 10022; 621 pp.; $12.95; ISBN 0-02-04891-9).

The final volume in William R. Trotter's trilogy on the Civil War in North Carolina focuses on the conflict in the state's coastal region. In ***Ironclads and Columbiads: The Coast,*** Trotter details the struggle for control of strategic railroads and canals, the sinking of the ironclad ram *Albemarle,* the battle for Fort Fisher, and other activities along the coast, which was the scene of more fighting than all other parts of the state combined. For reviews of the two previous volumes, *Silk Flags and Cold Steel: The Piedmont* (Vol. 1) and *Bushwhackers!: The Mountains* (Vol. 2), see *North Carolina Libraries* 47 (Summer 1989): 126-127 and (Winter 1989): 262-263, respectively. (**Ironclads and Columbiads,** Vol. 3; 1989; Piedmont Impressions, P.O. Box 29364, Greensboro, N.C. 27429; 456 pp.; $19.95; ISBN 0-9293307-05-4; cloth.)

With ***Carolina Follies: A Nose-Tweaking Look at Life in Our Two Great and Goofy States,*** veteran *Charlotte Observer* reporter Lew Powell offers incontrovertible proof that Foot-in-Mouth Disease frequently victimizes Carolinians, and that this behavior can be unintentionally hilarious or simply hard to believe. Borrowing the idea from *Esquire's* "Dubious Achievements Awards," Powell since 1977 has annually published in the *Observer* a year-end review of absurdities and *faux pas* from the Carolinas, an area he labels "a satirist's paradise." In ***Carolina Follies,*** he has collected over two hundred of his favorite quotations and summaries of "screwball news," providing the reader a laugh-filled look at "the very best in foibles and foolishness." (1990; Down Home Press, P.O. Box 4126, Asheboro, N.C. 27204; 96 pp.; $6.95; ISBN0-9624255-1-6; paper.)

The eleventh in the series of short county histories published by the Historical Publications Section of the North Carolina Division of Archives and History, ***Cumberland County: A Brief History*** offers a concise but informative account of the heritage of one of North Carolina's more historic counties. Author Roy Parker, Jr., editor of the *Fayetteville Times*, ranges widely, from economic to social to political topics. Scottish Highlander settlements; the development of Fayetteville as a political, economic, and cultural center; the destruction of an important Confederate arsenal; and the establishment of Fort Bragg are but a few Cumberland highlights included. (1990; Historical Publications Section, 109 East Jones Street, Raleigh, N.C. 27601-2807; 158 pp.; $6.00, plus $2.00 postage; ISBN 0-86526-243-8; paper.)

The Historical Publications Section has also recently published Volume XII in its acclaimed ***North Carolina Troops, 1861-1865: A Roster*** series. This volume covers the Forty-ninth through Fifty-second Regiments, North Carolina Troops, Confederate infantry. In addition to the roster of soldiers, compiler Weymouth T. Jordan, Jr., provides unit histories. (1990; Historical Publications, 109 East Jones Street, Raleigh, N.C. 27601-2807; 565 pp.; $27.00, plus $3.00 postage; ISBN 0-86526-017-6 (Vol. XII), 0-86526-005-2 (series); cloth.)

NCLA Minutes

North Carolina Library Association Minutes of the Executive Board

April 20, 1990

The Executive Board of the North Carolina Library Association met Friday, April 20, 1990, at 9:00 a.m. in the Educational Resources Building of Durham Technical Community College. Prior to formally calling the meeting to order, President Barbara Baker introduced Doris Anne Bradley, Chair of the Constitution, Codes, and Handbook Revision Committee, who presented the Review of Parliamentary Procedures which had been scheduled for the January 25 meeting. Previously mailed to the Executive Board were the NCLA Constitution and Bylaws, a description of the Executive Board and its duties, and the NCLA calendar of dates and deadlines during the biennium. These will become part of the new edition of the NCLA Handbook.

President Baker called the meeting to order at 10:00 a.m., welcomed guests C. Betina Morris from the Dept. of Administration and Leonard Sherwin, who represents Friends of N. C. Public Libraries, relayed apologies from Leland Park and Howard McGinn, who could not attend, announced changes to the agenda, and welcomed the Board to Durham Technical College. Present at the meeting were Doris Anne Bradley, Martha Fonville, Reneé Stiff, Laura Benson, Pat Siegfried, Susan Janney, Jane Moore, Robert Gaines, Martha Ransley, Leonard Sherwin, Steve Sumerford, Joanne Abel, David Gleim, Pat Langelier, Johannah Sherrer, Frances Bradburn, Janet Freeman, Melanie Collins, Nancy Ray, Karen Seawell, C.Betina Morris, Nancy Bates, David Harrington, Michael LaCroix, Sylvia Sprinkle-Hamlin, David Fergusson, Barbara Baker, and Amanda Bible.

Minutes of the January 24-25 meeting were corrected to insert "bylaws" between "section available," to include Art Weeks as present, to correct spelling of Robert Gaines, Robert Reid, Bil Stahl, and Martha Ransley. Minutes were approved as corrected.

Jane Moore, reporting for State Librarian Howard McGinn, stated that the ACC psa videos had received an award from the National Commission on Libraries and Information Services, and that funds are still being solicited to cover the cost of the fall series. Plans for the nine regional conferences that will precede the Governor's Conference on Libraries were presented. LSCA has been authorized by Congress for the next five years, but the funding is unknown at this time.

Because of the state budget short-fall in revenue, the Dept. of Cultural Resources is expected to return $3 million, but it will not come from aid to public libraries. Eunice Drum is retiring and two positions, Information Specialist and General Institutional Consultant, are vacant. The State Library will have a booth at ALA for recruitment and promotion of library services. Library brochures and volunteers to staff the booth were requested. Comments were made about the changes in ILL service through In-WATS for community college and small independent public libraries.

Treasurer Michael LaCroix's report showed $3,202.03 in the checking account, $77,826.45 in Certificates of Deposit as of March 31. January-March disbursements totaled $107,516.74 and all sections have credit balances. The audit report has been received and is available for examination. NCLA is in good financial shape. It was noted that any money from the NC Humanities Council for the Books of America program, including accrued interest, that is not spent on the program will have to be returned.

Administrative Assistant Martha Fonville distributed SELA brochures and bookmarks, announced that the membership database is almost set up, so that mailing labels and membership statistics will be available. She noted that there has been about 45% renewal of members since January and twenty new members. A calendar of all meetings is being maintained to aid in planning and to avoid conflicts. David Gleim asked if it would be possible to add the Executive Board to all of the organizations within NCLA to improve communication. This was approved by consensus.

Frances Bradburn, Editor of *North Carolina Libraries*, reported that the spring issue is scheduled to be mailed this week. The publisher changed from off-set typesetting to desktop publishing with this issue. The small savings from this change was offset by the change to acid-free paper. A report of the upcoming issues through Winter 1993 was distributed. A discussion of why NCL did not receive a John Cotton Dana award again this year, even though the substance of the publication is good, followed. Possible format changes to improve the appearance of the journal were suggested, but it was noted that any changes would increase the cost, and it currently costs approximately $17.00 per member. If members feel that changes should be made, this should be communicated to Nancy Fogarty, Finance Committee Chair, who is working on the 1991-92 budget.

Committee Reports

Janet Freeman, Conference Committee Chair, presented a report with three site proposals for the 1993 biennial conference: Raleigh, High Point, and Winston-Salem. After discussing the merits of each site, the Executive Board voted to accept the Winston-Salem proposal for October 19-22, 1993.

Guidelines for preparing NCLA bulk mail and a charge-back schedule, prepared by Janet Freeman and Martha Fonville, was presented. This will be included in the new Handbook. Doris Anne Bradley announced, with credit to Martha Fonville, that the new edition of the Handbook should be ready before the next Executive Board meeting in July. The Committee is to meet again on May 10. An addition will be a compilation and explanation of all awards given by NCLA and the various sections. An amendment to the Constitution is needed to require the biennial audit, which is being done, but it is not in the Constitution nor Bylaws. Also, the membership year for those who join in the last quarter of the biennium needs to be clarified.

President Baker, reporting for Nancy Fogarty, Finance Committee Chair, stated that both the old and new committees had met and that the committee would be meeting on May 10 to consider two grant proposals.

Dave Fergusson, Governmental Relations Committee Chair, reported that $400 had been contributed to supporting the ALA Legislative Day and registration of $12.00 each had been paid for the 18 members who will be attending. Appreciation was expressed to Bob Ward for much of the planning. Briefly discussed was the LSCA program and the federal literacy program, which is supported by President Bush.

Tina Morris, from the Department of Administration, presented information about the Literacy Partnership Conference, "Putting the Pieces Together," which is to be held July 27-28 at the Four Seasons in Greensboro. Governor Martin will be the keynote speaker. The Dept. of Cultural Resources, State Library will be co-sponsoring the conference.

Pauline Myrick was absent, but a Nominating Committee report was presented by President Baker. David Fergusson and Augie Beasley were nominated for the SELA Representative position. There were no further nominations and the report was approved unanimously. The ballots will be mailed to the administrative office and will be due June 1. The Nominating Committee also distributed a form requesting suggestions for 1991-93 officers, to be received before their May 4 meeting.

Art Weeks, Chair of the Public Relations Committee, has left the state to become director of the Finger Lakes Library System in Ithaca, NY. The Committee completed the "Night of a Thousand Stars" project for National Library Week and completed the video psa featuring Robert Reid of the Charlotte Hornets.

Pat Siegfried, Chair of the Children's Services Section, reported that the programming publication, *Reel Readers*, is selling well and has already shown a profit of over $200. The section agreed to present the ALA Notables Showcase at the NCASL Conference in September. The CSS Board will be working with the NCASL Committee studying the possibility of a North Carolina children's book award. The section will sponsor a membership reception, an author breakfast and a booktalking program at the NCLA Conference.

Martha Ransley, Chair of the College and University Section, announced a workshop, "Networking: The Challenge of Working Together," planned for May 11 at Elon College. Jerry Campbell is to be the featured speaker.

Community and Junior College Section Chair, Susan Janney, reported that the section sponsored a program, "CD-ROM for Reference Services," at the NCCCLRA Conference in High Point on March 21 which was moderated by NCLA President Baker. Pat Richardson has been selected as NC Libraries editorial representative. Mike McCabe will serve as the chairman of the section's new public relations committee.

Bob Gaines, Documents Section Chair, reported that over 1,000 announcements of the spring workshop, "The United States Census Bureau and the NC Data Center: Statistical Products for the 70's," scheduled for May 18 in McKimmon Center at North Carolina State University, had been mailed. The section met April 2 to discuss the upcoming Governor's and White House Conference and to prepare a list of issues, which was submitted to Diana Young, Conference Coordinator. The section expressed concern about the proposal of Secretary of State Rufus Edmisten to distribute a basic package of state publications and information to all junior and senior high school libraries in the state. The section is communicating with the Secretary to suggest that NCASL and the Documents Section be brought into this discussion and to point out that with more than 700 libraries involved, this plan would need ample funding and excellent preparation. The Secretary has applied for a Reynolds Foundation Grant to fund this distribution. Also suggested was the possible creation of a video featuring the publications to be distributed.

Nancy Ray reported that the executive committee of the Library Administration Section had met February 27 and March 23, and plans are underway for a fall workshop, "Managing in a Time of Financial Uncertainty."

Melanie Collins, New Members Roundtable Chair, reported their board met April 9 in Lillington and decided to participate in the ALA/JMRT Outreach Program in 1990 by making presentations to the new classes in library schools during the fall semester and to plan a conference program in 1991. They are seeking an affiliate to ALA since the current affiliate is moving out of the state.

Laura Benson, NCASL Chair, reported that the biennial conference will be held September 27-28 in High Point. Three members will be attending the national Legislative Day. The section is planning, with the Children's Services Section, to sponsor a children's book award. The next board meeting will be May 11 in Greensboro.

Nancy Bates, Chair of the Public Library Section, reported that the Planning Council met February 9 in Lexington. Two committees, Automated Services and Literacy, were eliminated since their concerns were being addressed by NCLA committees. Adult Services is sponsoring a bookmobile workshop April 30-May 1 in Greensboro. The Audiovisual Committee is preparing an AV Directory/Resource Guide and will sponsor another equipment repair workshop. The Governmental Relations Committee, with the Public Library Directors Association, will sponsor a "Thank You" endeavor for legislators during the upcoming short session of the General Assembly. Dave Fergusson, Chair of the NCLA Governmental Relations Committee, will serve on the coordinating committee. The Personnel Committee is planning activities with library schools to attract qualified people to the profession and also plans to address the issues of pay equity and recertification. The Public Relations Committee plans hands-on workshops, an ongoing swap and shop, and a conference speaker, as well as presently assisting with the "Night of a Thousand Stars" nationwide effort encouraging family reading. Robert Reid of the Charlotte Hornets and artist/author Bob Timberlake will be featured in North Carolina television public service announcements. Governor Martin has issued a Family Literacy Proclamation for the promotion. The Young Adult Committee reported on its successful publication, Grassroots, the homework workshop and the "Best YA Materials" bibliography. The next meeting of the Planning Council will be May 4 in Lenoir at the Caldwell County Public Library.

Johannah Sherrer, Chair of Reference and Adult Services, reported that a workshop is planned for September 28 in Winston-Salem which will emphasize the art of reference and the use of technology. An attitudinal survey of library directors' expectations of reference service will be conducted by mail prior to the program and will be reported as a prelude to the program. The section has another task force, reference accuracy improvement. Based on the Maryland model of training reference staff, it is a program set up for training trainers. It is an on-site training program based on the theory that behavioral aspects determine the success of reference transactions. The task force is to report on June 1 on the feasibility of offering this program in North Carolina. The section has a collection development proposal to relate collections and reading recommendations from groups such as the Cancer and Heart Associations and to put their findings on the electronic bulletin board.

David Gleim, Chair of Resources and Technical Services Section, reported that their executive committee has met twice. Minor revisions need to be made to the RTSS Bylaws to conform to ALA changes. The exact wording will be sent to the Chair of the Constitution, Codes and Handbook Committee. Other activities of the section were planning for issue No. 2 of the section newsletter, NCLA/RTSS Update, planning for the fall RTSS Conference to be held October 25-26 at the Durham Hilton Hotel on customized versus standardized technical services, and deciding to fund the printing and mailing costs of a directory of NC curriculum materials centers. This is a project of Joanna Wright, Head of Special Services at UNC-Wilmington and a member of the RTSS executive committee.The committee will seek LSCA Title III funding for partial expenses of the conference.

Reneé Stiff, Roundtable on Ethnic Minority Concerns Chair, reported their executive board met February 22 at A. & T. University and projects discussed for the biennium include a program to provide management and leadership training, especially for minority librarians, spearheading a project that will result in a publication on the state of minority librarianship in NC, sponsoring two workshops during the biennium, and setting a regular publication schedule for the newsletter. April 27 is the next meeting date for the board.

President Baker reported that Maury York, Chair of Roundtable on Special Collections, was not able to attend, but she noted that a grant proposal for a project had been submitted to the Finance Committee.

Karen Seawell, President of the Roundtable on the Status of Women in Librarianship, reported that the executive board met February 6 in Rockingham to formulate plans for a workshop, "Plateauing: How to Tread Water Without Going Under, A Life Saving Workshop by the RTSWIL," to be held August 9-10 at Forsyth County Public Library, and to develop a publication schedule for MsManagement.

Terri Union, Chair of the Trustees Section, could not attend but asked President Baker to remind the Board of the Trustee Conference May 18-19 at the Hilton Hotel in Durham.

Patricia Langelier, ALA Councilor, reported that she would be attending the annual ALA Conference in Chicago June 23-28 and would report at the next Executive Board meeting.

Jerry Thrasher, SELA Representative, sent a report with information about a possible chartered bus from Raleigh to Nashville for the Biennial Conference December 4-8 at Opryland Hotel. The cost would be $99 per member. Total cost would be $2,635 for the bus, $385 for a registration flyer, and $247 for refreshments and favors. Pickup points would be Raleigh, Greensboro, Winston-Salem, and Asheville, departing Raleigh December 4 and returning December 8. Laura Benson moved that Jerry proceed with the plans. Seconded by Dave Fergusson, the motion carried unanimously. The theme of the conference will be "Southern Harmony: Libraries in Tune for the Future." The SELA report showed that NC has the second largest membership with 162 members. Florida announced that they would not be able to host the 1994 conference since ALA would be meeting in Florida that year. It was suggested at the March 2-3 Leadership Workshop in Atlanta that the SELA states work together on the most important issues at the White House Conference, and that they could vote as a block on issues of mutual interest. The SELA states represent 136 votes, 22% of the total votes at the WHCLIS.

President Baker's report on activities she has attended included the SELA Leadership Workshop in Atlanta March 2-3. North Carolina was suggested as a possible site for the 1994 SELA conference. Barry Baker, Chair of the SELA Site Selection Committee, contacted President Baker about the possibility of a joint conference. Since this would be the year for the NCASL conference, the suggestion was referred to their executive board. Mr. Baker has contacted Charlotte and is going with President Baker, to visit Winston-Salem, also a possible site. Also attended was the NC Association of High School Library Assistants Conference, of which NCLA is a sponsor. The Membership Committee had a display at this conference. President Baker has been asked to be the banquet speaker for the Durham County Library Association meeting and has been asked to serve on the steering committee for the Governor's Conference on Libraries and Information Services.

New Business:

Guests Joanne Abel from Durham County Library, and Steve Summerford from Greensboro Public Library reported that there is a movement afoot to create a new roundtable, Social Responsibilities, which would represent the same interests as the ALA Social Responsibilities Roundtable. A petition had been signed, but it did not have the required 100 valid signatures. After much discussion on the purpose of the roundtable and the procedure dealing with the formation, it was suggested that no action be taken until there was a request with the required number of signatures.

Leonard Sherwin, Treasurer of the Friends of NC Public Libraries, announced that the Friends would be co-sponsoring the Trustee Conference May 18-19 in Durham, that dues would be increased from $5 to $10, and mentioned ways the Friends help public libraries.

Melanie Collins moved that NCLA spend $2,500 to fund one of four television public service announcements featuring ACC football players promoting libraries and reading which would be shown during football season. Seconded by Nancy Ray. Dave Fergusson suggested that there be more emphasis on libraries and librarians. The psa production is coordinated by the State Library. Jane Moore will relay the suggestion. Motion carried unanimously.

There was a question about a report from the Scholarship Committee on the status of the McLendon Loan fund. A report should be given at the next meeting.

David Gleim suggested that it would be helpful to have an announcement in NCL or Tarheel Libraries, in the issue preceding the ALA election, of NCLA members who are running for an ALA position. It was agreed by consensus that Jane Moore would suggest this to the editor of Tarheel Libraries.

The July 20 meeting will be at Asheville-Buncombe Technical College, and the October 19 meeting will be at the Seahawk Hotel in Morehead City.

Meeting adjourned at 1:20 p.m.

Amanda Bible, Secretary

Read

American Library Association
Annual Conference Report
June 23-28, 1990, Chicago, IL
July 20, 1990

Three Council meetings were held. Action was taken on a variety of issues. Summary information on most of the resolutions adopted by Council at the Annual Conference is included in this report. Please let me know if you would like a copy of any Council Document mentioned. I'll be glad to mail a photocopy to you.

Implementation of a Midwinter 1990 Council motion: In response to *Tribute to 100 Years of Children's Rooms in Public Libraries* (Tribute #2), commemorative posters and self-stick note pads were produced to mark the centennial of the establishment of children's rooms in public libraries. Items can be ordered through the ALA Graphics Department.

The most notable resolution which passed: CD #90 Resolution on Smoking in Open Meetings of ALA: "Therefore, be it resolved that Article 7.1.5 of the ALA Policy Manual be replaced with the following statement: 'Smoking is prohibited in open meetings and programs sponsored by ALA units during ALA conferences and midwinter meetings.' "

ALA Executive Director Linda Crismond delivered her report to Council: ALA now has 50,575 members. Conference attendance reached an all-time high of 19,868. Linda would like to visit ALA chapters in every state and welcomes invitations.

ALA Awards of Interest to North Carolina Librarians

ALA General Awards: Baber Research Grant to Evelyn H. Daniel, School of Information and Library Science, UNC-CH for "Information Services to Small Businesses from Public Libraries."

Reference and Adult Services Division: Dartmouth Medal to Encyclopedia of Southern Culture (University of North Carolina Press, 1989). Gale Research Award for Excellence in Business Librarianship (BRASS) to Diane C. Strauss.

American Association of School Librarians: Bill Backer Memorial Scholarship to Wilma H. Bates, Greensboro City Schools. National School Library Media Program of the Year Award (Large School District) to the Greensboro City Schools.

Association for Library Collections and Technical Services: ALCTS Resources Section/Blackwell North America Scholarship Award to Joe A. Hewitt. The "Best of LRTS" Award/ALCTS to Joe A. Hewitt.

Library Administration & Management Association: (John Cotton) Dana Public Relations Award (with the H. W. Wilson Co.) to Public Library of Charlotte and Mecklenburg County, Inc.

Major Council Documents Adopted at Annual Conference: Many Council Documents are distributed throughout the year. Council Documents can be ALA Committee reports, letters, memoranda, information sheets, background papers, agendas, directories, rules, procedures, guidelines for preparing resolutions, status reports, plans, policies, press releases, progress reports, Executive Board reports, memorials, and resolutions. The following 1989-90 Council Documents (CDs), were approved, adopted or accepted at Annual Conference 1990. They are listed in order of consideration.

CD #30 Resolution on Midwinter Meeting Purposes: "The ALA Midwinter Meeting is convened for the primary purpose of expediting the business of the Association through sessions of its governing and administrative delegates serving on boards, committees and Council. Programs designed for the continuing education and development of the fields of library service shall be reserved for Annual Conference except by specific authorization of the Executive Board acting under the provisions of the ALA Constitution."

CD #47.1 Report to The ALA Council on Editorial Policy From the Committees on Publishing, Intellectual Freedom, and Professional Ethics.

CD #83 Policy Monitoring Committee report to Council: Notable action taken includes incorporation into the *ALA Policy Manual* the following **new policies** adopted by Council in January 1990: 50.10 NCLIS Membership and Appointments. The ALA supports the appointment of members of the NCLIS in an expeditious manner with appointees who fully meet the requirements of the statute.

50.13 Environmental Issues. The ALA urges librarians and library governing boards to collect and provide information on the condition of our Earth, its air, ground, water and living organisms from all available sources.

Notable action taken includes incorporation into the *ALA Policy Manual* the following **revised policies** adopted by Council in January 1990:

53.1.3 Access to Resources in the School Library Media Program. Students and educators served by the school library media program have access to resources and services free of constraints resulting from personal, partisan, or doctrinal disapproval and which reflect the linguistic pluralism of the community.

53.1.1 Challenged materials. Challenged materials which meet the criteria for selection in the materials selection policy of the library should not be removed under any legal or extra-legal pressure.

53.1.11 Diversity in Collection Development. A balanced collection reflects diversity of materials, not equality of numbers. Collection development responsibilities include selecting materials in the languages in common use in the community which the library serves . . .

53.1.2 Expurgation of Library Materials. Expurgation of any parts of books or other library resources by the library, its agent, or its parent institution is a violation of the Library Bill of Rights because it denies access to the complete work, and therefore, to the entire spectrum of ideas that the work was intended to express.

CD #61.5 Freedom to View. The ALA endorses the Freedom to View, a statement of the (Educational Film Library Association) American Film and Video Association.

CD #86 Resolution on the Reauthorization and Reappropriation of the National Endowment for the Arts and the National Endowment for the Humanities: "Resolved, that the ALA strongly urges the members of the U.S. Congress to resist any limitations or reductions of the appropriations for the NEA, the NEH or the Institute of Museum Services on the basis of doctrinal disapproval of projects funded by the Endowments . . . .

CD #79 Report to Council of ALA President Patricia W. Berger.

CD #91 Chapter Status for the Guam Library Association: "Resolved that in accordance with Constitution Article X, Section 3, and Bylaws Article V, the ALA Council approve the application for Chapter status in the American Library Association from the Guam Library Association."

CD #98 ALA Committee on Minority Concerns: report to Council.

CD #88 Planning Committee: report to Council.

CD #82 Intellectual Freedom Committee: report to Council.

CD #93 Resolution on "Fair Use" of Unpublished Sources: "Resolved, that the ALA express its support and urge Congress to enact legislation which would eliminate the distinction between published and unpublished materials with regard to the fair use of quotations."

CD #94 Resolution concerning drastic reductions in the budgets of military libraries: "Resolved, that the ALA again urge the President of the United States, the U.S. Congress, and the Heads of military departments and agencies to seek other means to control expenditures rather than to close, reduce, or contract-out libraries and information centers."

CD #95 Resolution concerning the need for expanding public access to the U.S. Department of Education Research Library: "Resolved that the ALA recommend that public access and use of the Department of Education Research Library be expanded by broadening the scope of the Library's mission and by providing additional resources."

CD #80 Disaster Relief Committee report.

CD #77 National Library Week resolution: "Resolved the ALA sponsor 'The Great American Read Aloud' during National Library Week and School Library Media Month each year. Resolved that the ALA Public Information Office and National Library Week plan and implement this national event. Resolved that all types of libraries — school, public, academic, military and special — be urged to participate in the annual 'Great American Read Aloud.' "

CD #87 Resolution on the Use of American Library Association Name and Logo(s): "Resolved that the Executive Director prepare a plan for the use of the ALA logo and related devices."

CD #89 Resolution on Closing of Schools of Library and Information Science: "Resolved, that this Association endorse the Columbia School of Library Service's call for establishment of a broad-based Special Commission by the ALA which would examine the issues addressed in the report of Columbia's Provost that led to eliminating this pioneering school, review the record of previous closings of library and information science programs to determine if a general pattern is discernable, and assess the general impact, of the closings of the several schools; and be it further Resolved, that this commission report its findings to the ALA Council by June 1991."

Membership Doc. #1 Poor People's Services Policy Resolution: "Resolved, that the ALA adopt the following policy on Library Service to Poor People, modeled on the ALA Minority Concerns Policy . . . The American Library Association shall implement these objectives by: (15-item list — please let me know if you want a copy). Council referred this resolution to ALA's Access to Information Coordinating Committee."

CD #92 Committee on Organization report.

CD #97 Resolution on The Starvation of Young Black Minds: The Effects of Book Boycotts in South Africa: "Resolved that the ALA reaffirm its current policies and not endorse the AAP report" (which recommends lifting of boycott against South Africa).

CD #82.7 Resolution in Opposition to the Anti-Obscenity Pledge Requirement of the National Endowments for the Arts and Humanities.

CD #82.8 Resolution in Support of Dennis Barrie and the Contemporary Art Center of Cincinnati: "Resolved, that the Council of the ALA on behalf of its more than 50,000 members honor and support Dennis Barrie and the board of trustees of the museum for their leadership and courage in resisting censorship and their commitment to the free expression of ideas in the face of extreme personal risk . . ."

CD #82.9 Resolution on Flag Burning: "Resolved that the ALA expresses its support and appreciation for the vote in the U.S. House of Representatives and the U.S. Senate to uphold free expression as provided in the Bill of Rights, by defeating the proposed constitutional amendment on flag burning."

CD #104 Resolution on Higher Education Act Reauthorization: "Resolved that the ALA supports reauthorization of the Higher Education Act with the following components: Title II-A, Academic Library Technology and Cooperation Grants, Title II-B, Library Education, Training, Research and Development, Title II-C, Strengthening Research Library Resources, Title II-D, College Library Technology and Cooperation Grants, Title IV-C, Student Assistance, Work-Study Programs, Title VI, International Education Programs Part A, Section 607, Periodicals Published Outside the U.S., Title VII, Construction, Reconstruction, and Renovation of Academic Facilities."

CD #106 Resolution on Government Publications Discontinued or Endangered: "Resolved, that ALA and its units use all normal channels of communication to alert ALA members and the general public of the dangers associated with the loss of these and other information resources; and be it further resolved, that ALA and its units use all normal channels of communication to alert U.S. government executive agencies and the appropriate Congressional committees of the value of these information resources to the American people."

CD #107 Resolution on the Defense Management Improvement Act of 1990: "Resolved, that the ALA urge Congress to delete section 216 of the Defense Management Improvement Act of 1990 that permits the Defense Department to bypass the printing procedure requirements of 44 USC 501, 502."

CD #109 Resolution of Support for Library of Congress Appropriations for FY 1991: "Resolved, that the ALA take immediate action to support and to encourage public support for the Library of Congress fiscal year 1991 appropriation request."

CD #100 Resolution on Postponement of Changes to the Annual Conference Skeleton Schedule: "Resolved, that the Council direct the ALA Executive Board to postpone implementation of conference scheduling changes until the 1992 Annual Conference in San Francisco."

CD #101 Resolution for Support of the International Youth Library, Munich, Germany: "Resolved, that the ALA go on record supporting the international focus of the International Youth Library."

CD #103 Resolution on Preservation Cooperation: "Resolved, that the ALA work actively through appropriate channels to expand and strengthen international programs of cooperation to preserve the cultural record worldwide, to promote the development of and adherence to technical standards for preservation techniques, and to encourage the national and international collection of and dissemination of bibliographic and holdings information about preservation masters."

Patricia A. Langelier, NCLA Councilor

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NORTH CAROLINA LIBRARY ASSOCIATION
1989-1991 EXECUTIVE BOARD

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