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**REPORT ON THE  
LIBRARY AND INFORMATION SERVICES  
POLICY FORUM**

**ON**

***Impact of Information Technology  
and Special Programming  
on Library Services to Special Populations***

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**May 20 - 21, 1996  
Ramada Plaza Hotel Old Town  
Alexandria, Virginia**

The views, opinions and recommendations expressed in this Report do not necessarily reflect the official position or policy of the National Center for Education Statistics of the U.S. Department of Education or the U.S. National Commission on Libraries and Information Science.

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**Funded by the  
National Center for Education Statistics  
and Co-sponsored by the  
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Office of Library Programs  
and the  
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Libraries, and Lifelong Learning**

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## INTRODUCTION

Here are Proceedings of the General Sessions of the fourth in the annual series of Library and Information Services Policy Forums. These are followed by summary reports and outlines of findings and recommendations of the discussion groups on:

<i>Group</i>	<i>Discussion Topic</i>	<i>Chair and Recorder</i>
I	Library Services to Educationally and/or Economically Disadvantaged (including literacy programs)	Jim Schepcke, Chair Christie Koontz, Recorder
II	Library Services to Multicultural Populations (including limited English-speaking)	Karen Watkins, Chair T. K. Cassidy, Recorder
III	Library Services to Physically Handicapped	Judith Dixon, Chair Mary Jo Lynch, Recorder
IV	Library Services to Rural and Rural/Remote Populations	Bernard Vavrek, Chair Jan Ison, Recorder
V	Library Services to Seniors	Hugh O'Connor, Chair Jan Feye-Stukas, Recorder
VI	Library Services to Businesses and Employers	Sam Memberg, Chair Joseph Shubert, Recorder

The objective of these Forums is to work toward the further improvement of national data on libraries and information services, for libraries of all types.

These Proceedings include herewith the deep appreciation to all those who participated in this Forum and to those who participated in its planning and administration.

Monday, May 20, 1996

## SECTION I: PRESENTATIONS

*Welcome*

Jeanne Griffith, NCES Acting Commissioner

“It is my pleasure, on behalf of the U.S. National Center for Education Statistics (NCES) and the U.S. National Commission on Libraries and Information Science, to call to order the Forum on Library and Information Services Policy. This is the fourth annual Forum, and I understand that today we have the most participants ever. We have about 80 people registered for both days, and I think that is terrific. People are coming from all over the world—from as far away as Guam and as close by as Washington, DC.

“I see a number of familiar faces and a lot of new faces, and it is my pleasure to welcome you all. I am Jeanne Griffith, Acting Commissioner at the National Center for Education Statistics. What I want to do this morning is to take a couple of minutes to talk about some of the things going on at NCES. Then, I would like to present a brief history of our Library Statistics Program (LSP).

“First, let me talk about NCES’ budget situation, which I think is of interest to everybody these days in terms of what is happening in various federal agencies. The Fiscal Year (FY) 1996 budget, which ends in September, was finally passed last month, and, so, we now have a budget for 1996. NCES’ budget was cut by \$2 million. It is a little complicated to explain, but, basically, we have two lines in our budget: a line for statistical programs and a line for assessment. Assessment is the National Assessment of Educational Progress (NAEP), primarily, and that is not where our library programs are located. That is in the statistics line of the budget, which accounts for all our surveys, data collections, and analyses, and that is where the \$2 million came out of. So, we had a slight reduction from about \$48 to \$46 million on that line of the budget.

“At this point, we do not perceive needing to cut any of our library statistics programs. We have tried to figure out where to cut various programs in the budget, and we have been able to make adjustments that did not require us to cut LSP. At this point, however, the Congress is talking about level funding at the 1996 level until 2002. Of course, level funding at the 1996 level means no increase for inflation, so that could be a very substantial decrease in the funding. We are, of course, anxiously watching to see what happens. Not to alarm anyone: there is a lot of discussion about very serious control on the budget in the future. We all need to be aware.

“NCES has been receiving level funding since FY 1993. In terms of staffing, the U.S. National Commission on Libraries and Information Science (NCLIS) has also had very severe constraints. We have not had any staff expansion since the late 1980s. Our budget increased from 1986 through 1993, with a small increase in staff during the early

years of that period. As we lose staff (staff do move on for professional reasons), we have not been able to replace them, and our staff has substantially declined. So, we keep looking for innovative ways to try to leverage the resources we have, to make sure that we are responsibly expending the funds, and monitoring and administering the programs.

“One thing that people are always interested in—and with good reason—is, “What is going to happen to the position of Commissioner of Education Statistics?” At this point, a nomination has been made by the President to the Senate to appoint Pat Forgione, the Chief State School Officer for the State of Delaware. Pat’s nomination has been approved by the appropriate Senate committee and is now awaiting full Senate approval. We are all anxiously awaiting for that to happen. Shortly after he receives the full Senate approval, we expect Pat to report to work as the new Commissioner of Education Statistics.

“Let me talk some about NCES’ Library Statistics Program because some of you may not be that familiar with the history. The Forums that we hold are all part of a cooperative and still-developing the NCES/LSP that began under the 1988 Hawkins-Stafford Act. The Library Statistics Program began a period of substantial change, progress, and innovation for NCES. It was a period of growth in our budget, staff, and in the overall survey program in the quantity and nature of the statistics that we gathered and the analysis of the data.

“No time was lost in 1988, the first year in developing the cooperative agreement with NCLIS. With the great help and assistance of NCLIS, we invited representatives from the 50 State Library Agencies to a meeting in Annapolis in December 1988. That meeting gave birth to what we now know as ‘The Federal-State Cooperative System for Public Library Data’ (FSCS), which is now in its eighth year of accomplishment and steady progress.

“And, LSP has grown ever since. In 1990, LSP developed a biennial Academic Library Survey Program. We then added another program to incorporate school library media centers and their personnel in our Schools and Staffing Survey, which is conducted on a periodic basis. Initially, it was conducted every three years; it is now scheduled to be conducted every five years.

“We have also worked with the Chief Officers of State Library Agencies to plan and administer the first annual National Survey of State Libraries in 1995. That first survey report will be published soon. We then cooperated with the Federal Library and Information Center Committee of the Library of Congress in developing and administering the first reliable Federal Library Survey; those data will also be published imminently. And, most recently, again in cooperation with our state library and public library colleagues, we began planning for a National Survey of Library Cooperatives. So, as you can see, there has been extensive work in the area of collecting data on library statistics. We are attempting, and we think we are achieving, comprehensive coverage in this area.



“Another thing we have done in the library statistics area is to use technology to great advantage and, probably, to the greatest advantage of any program that we have in NCES. Again, referring back to 1988, I would note that the FSCS Public Library Survey Program participants should be commended for being the first of the NCES surveys to use computers at both the state and the federal level to record, edit, transmit, and publish the annual data. That program improved the quality of the data, and it certainly improved our ability to get the data out the door on a very timely basis.

“Now, we have begun efforts with public libraries to try to develop their electronic data collection and reporting capabilities from the local public library levels to their respective State Library Agencies who will then send their data to NCES.

“So, the Library Statistics Program is an outstanding example, has an outstanding record of experience for using technology to great advantage, and sets a superb example for other NCES surveys.

“Underlying all of this rapid development in the breadth of our Program has been the cooperation and dedication of the planning and executive bodies associated with these surveys. We are certainly trying to reflect, statistically, the very rapid changes taking place in library and information services at the local, state, and territorial levels. These changes are particularly major when it comes to electronic information services, but, at the same time, there are very substantial challenges to improve the quality of, and the equity of, access to library services for all of the people in the country. And, our surveys need to reflect that. In an Information Age, you cannot afford to have any population being ‘Information Have-Nots.’ It is a key role of libraries! I believe that we need to be positive that we are collecting the data which informs the public about progress in this area.

“As you can see, all of the rapid societal and technological changes taking place over the last eight years formed the 1992 back-drop for Emerson Elliott to recommend an annual series of policy Forums on library and information services. This is the reason we are here today.

“This is a good point for me to introduce Emerson and to turn the Forum over to him as your Chair. Having been the NCES Acting Commissioner since Emerson’s retirement in July 1995, I can say with a much greater depth of feeling and appreciation how much I appreciated his leadership and mentoring while he was Commissioner. It is my great privilege and honor to welcome Emerson and to introduce you to one of our country’s most distinguished civil servants.”

## ***Purpose***

### **Emerson Elliott, Forum Chair**

“It is a privilege to be chair of the fourth annual Forum. The subject of this year’s Forum is, Impact of Information Technology and Special Programming on Library Services to Special Populations. Today, if you look at the program, you will see one set of phrases like: ‘value of services; measuring results; measuring change; measuring services; and measuring outputs.’ The other half of the terminology reads like: ‘educationally and/or economically disadvantaged; multicultural populations; physically handicapped; rural and rural-remote populations; businesses and employers; and seniors.’ It is perfectly obvious as you look at the two sets of phrases that we are talking about data and about services.

“Why does anyone care about data on libraries? The answers are simple: 1) to know, and 2) to decide. Actually, I think librarians and statisticians have a great deal in common. Librarians are organizers of information. Statisticians and statistical agencies define terms for things that are to be measured, and they organize data. In recent years, I think that both librarians and statisticians have learned that policy makers want different kinds of information these days. It used to be enough if we had information on the: 1) number of volumes in the collection, 2) number of hours the library was open, 3) number of loans made from the collection, 4) size of staff, and 5) costs and expenditures. Policy makers could use that data to decide on the budget. I do not believe this is any longer true.

“Jeanne just described the budget situation. And, from what I hear, the budget situation in Washington is not all that different from budget situations in public libraries and institutions everywhere in the county. Everyone is making difficult trade-offs.

“When John Lorenz was at the Michigan State Library, my father was the City Manager of Kalamazoo, Michigan. My father had to make decisions about how much money would be invested in the public libraries in his community. I do not know how much John made-up for the local public library deficits in those years, probably not very much. However, state funding for libraries have come a long, long way since then!

“Today, different types of questions are asked, such as: 1) What service do you offer? 2) To whom do you offer that service? and 3) What is the value of that service? Those are three very tough questions. And, people are asking those questions at the same time that technology is changing the look, feel, and access of library information. Recently, I recently stopped by the brand-new New York Public Science, Industry, and Business Library. It is a magnificent and wonderful place to be in; there are computers everywhere. But, at the same time, it is very attractive and welcoming. Recently, I read in the New York Times about San Francisco’s brand-new library, and I imagine it has some of those same attributes, but, maybe, not as many computers quite yet.

“This conference is organized for small group discussions, and everyone will have an opportunity to participate. As we move into those small groups, I think it will become obvious that discussions will focus on data gaps and what should be done about them. I would like to make one special request. You will find a set of questions for discussion during the small group sessions. I ask you to take responsibility for assuring that the answers to these questions are as concrete as possible so we can think about the nature of the data tasks. During conferences, it is often difficult to think about what would be nice to have and to figure out how to get there. Sometimes, the ‘nice to have’ is not essential. You think about essentials. But, you also consider: 1) What is required to make this something we can use? 2) Is this a developmental task, 3) Are researchers needed to help understand how to approach issues and to offer some alternatives? 4) Is it so clear cut and well defined that libraries can simply add the item to their existing data collection, and report? 5) Is it a matter that requires analysis and interpretation? 6) What does a city manager, a mayor, a local commissioner, a state legislator, a library board, and/or a governor need to know to make decisions regarding libraries? and 7) What can we give them? Make your views as concrete as possible.

“Remember, too, that you are not just discussing something that is ‘way out there’ and something you cannot do anything about—because money is not available. One issue you should think about during this Forum is the unique kinds of information gaps not meeting definite needs. If you find that need, you will, somehow, find a way to meet it. Nothing will affect the kind of information available for policy makers more than that. If you have talked to a legislator or a government administrator, you know the kinds of questions they ask; you must figure out the best way to answer their questions.

“The suggested questions are:

1. What are useful applications of information technology to library services for this special population group?
2. What special library programming/services is available for library services for this special population group?
3. For 1 and 2, above, is there data available on these technology and/or programming applications or is there a data gap? If there is a data gap, should there be a recommendation that the data gap be filled in future data collections?
4. If data have been collected on 1 and 2, what is the source and type of these data? How useful are these data? For example, what type of data are collected—input data, output data, impact/value data, evaluation? At what level are these data collected: 1) facility (e.g., school, public library branch, academic library); 2) local; 3) state; 4) national? Does the level at which it was collected address the data need? How frequently are these data collected, and is the frequency enough?

The group may also wish to comment on key data elements that are needed in data collection.

5. What recommendations can be suggested about methods, including technological, that might be used to measure both outputs and value to the special population group?
6. Based on the discussion of 3, 4 and 5 above, what recommendations does the group wish to make about data gaps or needed improvements in terms of topics for data collection, types of data that should be collected, level of data collection, frequency of data collection, and methods of data collection?

“You should think of this Forum as a way to share information needed to influence others, like yourself. What we do not want to come of the Forum is an agenda of impossible tasks for the cooperative Library Statistics Program. Rather, the result can influence the library and information services field with newly-generated ideas which, hopefully, will: 1) appear in professional library and information journals, 2) be discussed during American Library Association meetings and conferences as well as other related conferences, 3) can influence the way your peers think about your responsibilities, and, finally, 4) can/will influence what NCES’ Library Statistics Program can accomplish.”

Mr. Elliott requested that the participants in attendance at the four previous Forums introduce themselves.

Mr. Elliott then introduced Betty J. Turock, President of the American Library Association and Professor, Rutgers University, School of Communication, Information and Library Studies. Dr. Turock spoke on Information Technology and Equity of Access.

***Information Technology and Equity of Access***  
**Betty J. Turock, President, American Library Association**

“Good morning, colleagues. It is no exaggeration to say that there is a momentous telecommunications revolution sweeping our country. Nothing happening today offers more challenge and more opportunity for the people of our Nation than the emerging national electronic information infrastructure, better known to the American people as the, ‘information superhighway’.

“I believe so strongly that getting the Nation connected is essential to the public interest that I made public policy on the information superhighway the focus of my year as President of the 58,000 member American Library Association (ALA). And, ALA staff have made this topic the focus of their activity. It is a major focus at the highest levels of government, as well. Political leaders from both sides of the aisle agree that all Americans must be connected. But, we need more than just words to guarantee free and open access to information in the twenty-first century.

“Over the past five years, ten major corporations spent more than \$40 million to influence telecommunications legislation and public policy. So, it is no surprise that technical and financial interests have dominated decisions about the information superhighway, overshadowing what it can do for the people and how it can address society’s needs.

**Who Will Reap the Benefits?**

“At the same time, the American public is being barraged with promises and proposals for the swiftly unfolding infrastructure. Amid the rhetoric, major questions arise about who will reap the benefits. Our electronic future holds the promise of facilitating communication and exchanging information across global, national, economic, ethnic, and social boundaries; and of creating communities united by similar interests where none previously existed. But, the evolving infrastructure will also have the ability to separate, exclude, and depersonalize, even effect loss of, cultural identity.

“While we describe the superhighway as providing easy access, quick response, informality, accessibility, and independence, we also recognize it as chaotic and disorganized; a pathway where it is difficult to sort quality information from the glut that proliferates and to trust the authority of what is found.

“The availability of more information than ever before can become empowering, informing, and educating for the people, but the policies set now can also increase the probability of information being perceived only as a commodity. Increased commercialization could turn the electronic frontier into a virtual shopping mall.

## The Big Four

“Major national policy on four public interests issues will ultimately dictate whether access to libraries remains free and open. They are: universal service, intellectual freedom, intellectual property rights and equity; all must lead to equitable, just, and affordable access to the electronic highway.

“The signing of the Telecommunications Act was historic. While it provides opportunity for unlimited economic gain in the private sector, for the first time, public institutions like libraries and schools, are slated for special telecommunications discounts, and given the designation universal service provider, a designation that brings with it an ongoing infusion of funds for technological transformation.

“In April, I introduced the American Library Association’s (ALA) position on universal service in testimony before the Federal Communications Commission (FCC). Among the specific recommendations in the filing are:

- that core universal services for the public—analogue to plain old telephone service (POTS) under the Telecommunications Act of 1934—should ensure the public’s ability to access the information superhighway;
- that text-based access is not sufficient to supply effective public service from libraries and schools. They need high bandwidth technology for interactive multimedia applications;
- that the definition of discounted special services for libraries and schools should include all telecommunications services available commercially;
- that the discount rates for telecommunications services should be the lower of either 1) the lowest price offered to any customer; or 2) a wholesale price, or fair-cost price, that would cover a company’s cost of offering a service; and
- that additional discount support should be made available in rural, insular, and other high-cost areas as well as in low-income areas.

“The states will play a major role in the definition of ‘universal access’. The way in which the special discounted rates are to be implemented is left to the Federal-State joint board. The amount of the discount will be determined by the FCC for the interstate services, and by the states for intrastate services. The discount is to be treated as part of a carrier’s universal service obligation.

“ALA’s full proposal, which recommends discount methodologies to determine specific library rates, was received with widespread interest by both the FCC and Congress. In the past year, ALA has experienced remarkable success in driving a stake in the ground for the public interest in the national legislative and public policy arenas. A challenging period is ahead as we attempt to make the definition of ‘universal service’

and the special rates meaningful in infrastructure implementation. But, important for us, librarians and educators are at the table as these decisions are being made in Washington.

“The second major public interest issue affecting access is ‘intellectual freedom’. The Telecommunications Act is, ‘a glass half-full and a glass half-empty’. The glass half-full is the universal service provision. The glass half-empty is the Communications Decency Act (CDA), a provision of the Telecommunications Act which makes it a crime to transmit or distribute indecent material. Under this standard, librarians and other information professionals could be sentenced up to two years in prison and be subjected to fines up to \$100,000 for using a computer system to transmit indecent material in a manner that would result in it being, even inadvertently, viewed by a minor.

“ALA believes strongly that the current criminal laws against preying upon children or subjecting them to obscene material—as solidly defined by the Supreme Court—can and must be vigorously enforced. But, ‘indecent’ is a vague and Constitutionally problematic word. Under the CDA, material that is perfectly legal for youth to view in books, films, or other media is may be illegal to view electronically.

“In February, ALA became the lead plaintiff in a constitutional challenge to the CDA. The Association put together a coalition called ‘Citizens Internet Empowerment’ that went into court representing twenty-six organizations, including America Online, Compuserve, Prodigy, Microsoft, the Association of American Publishers, the American Society of Newspaper Editors, the National Association of State Universities and Land-Grant Colleges, Society of Professional Journalists, People for the American Way, Families Against Internet Censorship, and others.

“Our challenge is based on the belief that: 1) the CDA is unnecessary; 2) the term ‘indecent’ is too broad, vague, and lacking in definition; 3) it criminalizes speech protected by the Constitution and the Bill of Rights; and 4) it does not protect children. In fact, it gives parents a false sense of security that the government is protecting them, when that is almost impossible in the world of electronic information. In enacting the CDA of 1996, without hearings, Congress effectively banned a substantial part of the public discourse on the new electronic medium. The case is assigned to the Fifth District Court in Philadelphia, where judges have joined it with a challenge from the ACLU. It is on the fast track and expected to reach the Supreme Court in the early fall.

“The third major public interest issue affecting access is the protecting of intellectual property rights, balanced by the doctrine of fair use. Original copyright legislation not only fosters the development of creativity in the arts and sciences, but also encourages the dissemination of that creativity broadly to the public.

“Copyright law lays the basis for the lending function of libraries. This year, ALA was one of the founders of the Digital Future Coalition—thirty library, education, and commercial organizations working together to make sure that the public interest receives due consideration in any copyright law changes.

“While supporting the updating of the Copyright Law for the digital future, the Coalition has proposed a package of amendments to the National Information Infrastructure Copyright Protection Act, making the point that the proposed legislation tips the delicate balance in current law toward authors and publishers—those who make financial gain—and that any change in copyright policy must continue to protect the public’s right to reproduce copyrighted materials in limited quantities for educational purposes.

“The final major public interest issue affecting access is equity on the information superhighway—just, equitable, and affordable access. Today, more and more of the information we need for our jobs, health, education, participation in government, and so forth, is only accessible through computers. The powerful technology of the information superhighway can help us find a job, research a medical condition, or connect students and scholars to the information they need around the Nation and the world. But, what if you do not own a computer? Or do not know how to use one. What if you cannot afford one? What if you cannot pay the on-line charges to get access? The evolving electronic infrastructure threatens to exacerbate the chasm that already exists between the ‘information rich’ and the ‘information poor’, even as it revolutionizes how we live, learn, work, and connect to one another.

“According to a recent New York Times article, two-thirds of all computers are sold to households with incomes of \$40,000 or more, but only one-in-three households reach that level. Statistics show that only one-in-ten Americans has access to the vast network of databases that are already part of the infrastructure. High cost and rapid changes in technology could place many more of us among the ‘information poor’.

“Throughout the past year. I have had three opportunities to testify before Congress. In each case our federal representatives demonstrated eagerness to rapidly adopt electronic technology for the dissemination of government information. If current plans go forward, by the year 2000 the Government Printing Office (GPO) will produce less than thirty titles in print. Congress will pass along the cost of conversion to the depository libraries—some 1,500 libraries designated by law to receive government information. And, if the depositories cannot afford to pay, the people will have to either pay or be locked out of the information they have already paid to create.

“Unless we take steps to protect the public interest, the electronic high speed lanes could become a road open to only those who can afford it. That is why we need equity on the information superhighway. And, as we all know (I am now speaking, purposefully, to the converted) that is where libraries come in. Historically, libraries have served as the Nation’s great equalizers, providing people—of all ages and in all circumstances—with the information they need regardless of their ability to pay.

“Libraries can also make technology costs more reasonable. In a country having trouble balancing its budget, it is far more cost-effective to concentrate on the library for



public access than it is to connect every home. That, according to Barron's Business and Financial Weekly estimates, would take over \$250 billion. And, librarians are there within the libraries to help the public find the right information from a sea of information, and to teach them to use the technology, keeping costs reasonable.

“According to a recent MCI Survey, Americans are eager to connect to the superhighway for the information it contains about health, government affairs, and education—the information needed to help them lead more satisfying lives tops the list of services wanted. And, the 100,000 libraries throughout the United States have that information—they are the Nation's information infrastructure; the natural points of entry to the high-speed lanes of electronic transmission! The people of the United States have already spent billions of dollars on their libraries, and it would be economically foolish not to ensure them a place in the electronic future of our country.

“But, where are the public policy studies that make these statements more than self-interest spoken by the president of the oldest and largest library association in the world?

#### Public Policy Research Needed

“Over the past five years, telecommunication economists have attended to definitions of universal service and the development of methodologies to determine special discounts. But similar data are not forthcoming from researchers in library and information systems and services. ALA's Washington Office, with the help of consultants and lawyers, had to puzzle that out for themselves. Public policy research is desperately needed.

“The Congress is urging electronic transmission on the 1,500 depository libraries in this country. The GPO asked for funding to study the impact of electronic transmission on the libraries and the people. But no funding was forthcoming. As a result, the current timetable is set—electronic transmission for all but thirty core documents in two years—without the basic questions answered, such as: 1) What is the readiness of depository libraries to receive electronic information? 2) What is needed to make them ready? and/or 3) What costs do depository libraries now incur nationally to distribute government information? We know this is a cost-effective program, and that libraries out-spend the federal government, covering costs for staff, facilities, organization, and retrieval tools, among others. But, there is no solid data to present the national picture.

“Shortly after becoming ALA President, I called a Forum on Government Information to formulate a proposal for the reorganization of the government information structure in an electronic future. I looked hard for public policy gurus in our domain who had been working on the multitudinous issues involved, but I came up empty handed. The GPO, with help from library leaders, has outlined a major study needed to prepare for the electronic frontier. However, to date, it has not received attention from

researchers or possible funding sources, such as the Office of Educational Research and Improvement, U.S. Department of Education.

“Even as we meet, two studies commissioned by Congress—one through the General Accounting Office (GAO) and the other through Booz-Allen—have questioned the mission and management of the Library of Congress (LC) in an electronic age, while it scrambles to respond. Where are the public policy researchers in library and information studies who have been looking at GPO, LC, and other major national information agencies to help determine and document realistic missions and structures for the future?

### Impact and Public Policy

“The fact that the results of evaluation studies in library and information systems and services have led to so few public policy action agendas is regrettable. In the last decade a shift has taken place in evaluation from the dominance of quantitative assessment to the addition of qualitative approaches. Over time, studies have revealed that, when performance measures—output measures for the most part—are compared, the differences discovered may not be due so much to performance as it is to the social and educational characteristics of the library’s public.

“Even in the face of evidence that applying output measures may make difficult the fair assessment of services, particularly those for special populations, they are still the most widely-touted measures. While outside our world, the emphasis is on outcome measurement, we have been slow to move into that realm—even where it is most appropriate. The focus of output measurement is the library. The focus of outcome measurement is the people using the library. The shift is to determine impact; for example, what happens as a consequence of a service?

“Questions of impact are basic to public policy. Questions like: 1) How well did the service meet the magnitude of the need uncovered? 2) Did it have the intended effects? 3) Did it reach the target audience? 4) What changes occurred in those audiences? 5) Were their skills enhanced? 6) Were they able to reach a personal goal that improved the quality of their lives or the lives of their family members? 7) Where are the studies that address the library of the future from the public policy point of view? and 8) Where are the studies that speak to society’s challenges, to what the people want and need, and how this can be united with professional views to make the electronic age of information have real meaning for our democratic society?

“We need more studies that judge electronic services within the context of our social environment and within the context of the lives of the people served. While we have debated the best way to measure, we have missed the point of public policy—input, output, cost studies, and the value of information related to the service supplied—are all pertinent, depending on the public policy questions asked. But, are we sufficiently engaged in the public policy arena to even know the questions that might arise?

“The superhighway of the peoples’ national information infrastructure is not about the future—it is about now. Research and library and information studies must not be diverted from this great opportunity. We can contribute to the development of the National Information Infrastructure (NII) based on fact, not just on conventional wisdom, and not on the research forthcoming from organizations unfamiliar with library and information services. Helping to build a socially-responsive NII is our job. Let us do it!”

A question and answer session followed.

Joan Challinor asked, “1) When Congress asks you about libraries, in what form do these questions come? and 2) What is the most asked question?” Ms. Turock replied, “In every testimony I have presented and in very many media performances, I am asked if I could choose only one—electronic information or books—which would I choose? If I were to say computers or books, it would make Congress’ job much easier. They would then be able to say it was my decision and not their decision. The questions on electronic information came from the Forum on Government Information. Questions such as: 1) What are we going to do with government information? 2) Is two years a reasonable and feasible expectation? I have said, ‘No, no, no’ many times. Fortunately, Congressman Allard—who is electrifying Congress by putting in the electronic information system—preceded me in my last testimony. When asked if Congress could be ready in two years, he stated, ‘No. Making electronic information any part of government is an ongoing job. It is not over in two years; not over in five; not over in ten. It is ongoing’. I breathed a sign of relief because he made my testimony much easier that day.”

Audience: “Does anyone help you with research questions?” Ms. Turock replied, “The question is, have we turned to researchers enough for help? I testified on a panel with Senator Snowe, Secretary of Education Riley, and a representative of Nynex. Nynex had a proposal which was not complimentary to ALA’s, but I must say; it was a proposal they had worked on by themselves in isolation. We need to integrate more with that world. If we had worked together, the proposals would have been better from both sides.”

**Information Technology and Measuring Change in Library and Information Service**  
**Peter R. Young, Executive Director, U.S. National Commission on Libraries and**  
**Information Science**

“First, let me add my welcome to this Forum. Jeanne Hurley Simon, the Chairperson of the U.S. National Commission on Libraries and Information Science (NCLIS) cannot be here today, and she has asked me to convey her apologies.

“As you know, there are several major ‘strands’ in today’s Forum. I hope we can discuss these strands as they relate to the purpose of the annual Forums—which is to work toward the further improvement of national data on libraries and information services for libraries of all types.

“Throughout this Forum we need to continue to ask: How will ‘x’ or ‘y’ or ‘z’ topic or question further the collection, dissemination, analysis, and use of data that will, in turn, improve library and information services? In other words: 1) How are we using the data we collect? 2) Is our data collection keeping up with the ways in which people use library and information services? , 3) Is it relevant and/or meaningful? 4) What does the data collected say about library and information services? and 5) What does it say to our funding authorities? Well, I could keep coming up with questions, but let me now tell you what my talk will include.

“My talk is entitled, Information Technology and Measuring Change in Library and Information Service, and I will discuss several facets of that topic:

1. A revisit of a speech given at the 1991 White House Conference on Libraries and Information Services (WHCLIS), which I hope will continue the theme of ALA President Turock’s speech and carry it forward to specific considerations for special populations, information technology, and change;
2. A look forward to the proposed changes from the Library Services and Construction Act (LSCA) to the Library Services and Technology Act (LSTA) and how those changes could affect the subject of this Forum; and
3. A summary of a just-completed study of Public Libraries and the Internet, just to illustrate the rapid changes since 1994 and to ask: 1) What types of data do we need to routinely collect? 2) What can this data tell us? and 3) What is the purpose of this data?

*Debra Kaplan at 1991 WHCLIS*

“Those of us at the White House Conference on July 10, 1991, heard an important and concept-expanding speech by Deb Kaplan, Vice President of the World Institute on Disability (who referred to herself as a ‘disabled activist’ working on access to

information technologies.<sup>1</sup> Some of you may recognize her name because of her membership on the Advisory Council for the National Information Infrastructure.

“I am aware that special populations, in terms of library and information services, include many groups that are not disabled. However, please listen to the major points from Ms. Kaplan’s WHCLIS remarks and hear how the word ‘special’ could be substituted for the word ‘disabled’ and still have the same dynamics. Her thesis was that ‘Meeting the needs of persons with disabilities with respect to library and information services need not be viewed as a special activity for people who are special.’ [Ms. Kaplan’s emphasis.] Her points to support this thesis are as follows:

1. Point one, and I quote, ‘The necessity of providing library and information services that are special, or out of the ordinary range of services that are provided to the general public, is really a function of the degree to which accessibility is found in the regular environment in which you function. . . .the need for special services reduces as the environment and the services that are provided have access built into them.’
2. Point two was that not all the services useful to persons with disabilities are limited in applicability or benefit. Here Ms. Kaplan cited: 1) Talking books, begun for blind and visually impaired people, are also enjoyed by many with no vision impairment, and 2) Everybody uses curb cuts, not just wheelchair riders. She added, and, again, I quote, ‘But, there is a message that goes beyond architectural design. Computer-based information technologies that are designed with what we call electronic curb cuts may well be the key to ultimate user friendliness.’ Deb mentioned such advancements as voice synthesis, keyboard emulation, and open captioning on television.
3. The third major point for reconsidering the notion of special services or populations was that there are significant overlaps among such groups, such as the overlap between: 1) disabled people and elders, 2) disadvantaged and disabled, and 3) illiterate, non-English speaking, and/or deaf people.

“I would like to finish this segment with one last quote from Ms. Kaplan—keeping in mind the substitution of ‘special’ for ‘disabled’. ‘As information technology becomes more a part of library services, universal access will become easier to achieve, provided it is considered in the planning process. Universal access means that persons with disabilities will be able to use systems and equipment intended for the general public as much as possible. This will require a shift in perspective: From considering persons with disabilities as outside the norm to a new perception of disability as a rather normal human characteristic to be taken into account when systems, consumer products, and technologies are designed.’

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<sup>1</sup> Information 2000, Library and Information Services for the 21st Century: Final Report of the 1991 White House Conference on Library and Information Services. Washington, DC: NCLIS, 1992. p. 275.

### Special Populations in LSCA and LSTA

“The traditional, well-known focus of LSCA Title is to make services more accessible to persons who, because of distance, residence, physical handicap, or other disadvantage, are unable to benefit from public library services regularly available. Will services to targeted populations be part of the proposed LSTA? If so, will they be emphasized to the extent they are in the LSCA?”

“A recent article in Public Libraries on the proposed LSTA, Nancy Zussy, Washington State Librarian, listed three items ‘of which the national library community should take note’.

1. A move from an emphasis on ‘**the** public library’ to ‘publicly supported libraries’.
2. A definite shift in authority—and responsibility—to the state and local level.
3. And, most pertinent for our discussions here, and I quote: ‘A move away from identifying each and every ‘special population,’ with guarantees for library and information access tailored to each, and toward the basic assumption that people, of whatever kind, with whatever limitations, and in whatever circumstances, have as a common—dare we say—right to access to the information they need in their lives. The result, if such a concept remains intact in whatever legislation finally emerges, should be a more egalitarian result than the frankly segregated approach of the past.’

### Whither Services to Special Populations?

“I have used a sizable part of my presentation, I hope, to encourage us to ask, not just about the future of library and information services to special populations, but what our goal should be in serving the special populations. And, behind that goal, we must ask: 1) What is our objective in collecting special populations data on library and information services? 2) Is our objective the ability to count and categorize everyone? 3) Is our goal to count everything that each member of a special group uses or requests? 4) Is our goal just to show ever-larger numbers of users and uses to persuade our funding authorities to give us additional funding? 5) Especially with electronic services, how do we maintain traditional categories? 6) Should we maintain traditional categories?.

“We have to know our goal before we know what to count. And, we must keep our eyes, minds, and resources on that goal in the midst of tremendous changes on many fronts.

### Whither Change?

“I will use the balance of my time to review changes as demonstrated in a series of studies on public libraries and the Internet sponsored by the U.S. National Commission on Libraries and Information Science. Copies of NCLIS’ comments to the Federal Communications Commission (FCC) on universal service are being distributed. These comments contain the first analysis and publication of data resulting from our 1996 study

and compares those results with the 1994 study. I would like to recognize one of the principals in the study, John Carlo Bertot. John is a panelist in this Forum.

“I wish the Commission could sponsor studies on all types of libraries; I certainly hope we can in the future. Meanwhile, the public library studies are interesting, informative, and useful to many people and officials at many different levels and places throughout the country.

“Now, returning to NCLIS’ latest study. We found a 113 percent increase in public libraries’ connectivity to the Internet—up from 20.9 percent in 1994 to 44.6 percent in 1996. However, despite this overall increase, discrepancies increased in connectivity by size of population served. Public libraries serving populations under 5,000 in 1996 were 58.6 percent less likely to be connected to the Internet than those libraries serving populations of 100,000 to over one million.

“Public libraries’ plans are just as interesting, or perhaps more interesting, than their current connections. For example, preliminary analysis of the 1996 study indicates that connectivity to the Internet could be more than 60 percent by 1997. That is just next year! That is both exciting and troublesome. Libraries and information services may be moving rapidly, but the environment is changing just as quickly.

“In 1997, just next year, there may be a new Library Services and Technology Act (LSTA) in place. In 1997, there may be rules from FCC on universal service. In 1997, there may be a new copyright law dealing with electronic information. In 1997, there may be new plans for the Federal Depository Library Program, as the dissemination of government information shifts more and more to electronic formats.

“Can we, in the library and information services field, cope? I think we have no choice if we are to stay relevant in the everyday life of people. We had better do more than cope; we had better take the lead!

### Conclusion

“For the purpose of this Forum, our questions keep returning to:

- Why, whom, and what do we count?
- Is it necessary or advisable to categorize services?
- In the future, will it be possible to categorize services?

“As I mentioned at the outset, there are several major strands in this 1996 Forum. They are: 1) Library and information services to special populations; 2) Measurement of services; 3) The value of services; 4) The value of changes; and 5) The value of information technology. I hope we can separate or interweave these strands as the discussions lead us. Thank you.”

Audience: I suggest that we not undertake the problem of attempting to prove that bringing technology into the classroom will make teaching more effective.

Peter Young: That is a very important point. It is easy to measure connectivity. What is hard to measure is the individual's qualitative education as a result of that technology. One of the basic reasons that NCLIS and NCES work together cooperatively is to sponsor these policy Forums to relate to the many professions and disciplines, to come to a deeper understanding of exactly what is happening in our institutions, and to discuss how they can be transformed into much more effective learning environments.

David Penniman: On the whole, I would say that a challenge for many school libraries and media centers is to demonstrate that electronic use by teachers and students makes both teaching and learning more effective.

Peter Young: There is both good news and bad news on public library connectivity to the Internet. The good news is that connectivity is growing in public libraries. The bad news is that the discrepancies are not simply in terms of geographic connectivity. The distinctions are between people who have only dial-up text-base versus public access graphics. If we continue in this same direction, the differences will increase. There will not be simply 'haves' and have nots', the distance between those two groups will increase.

Joey Rodger: I see one real challenge. On one hand, you have a definite need for the blind and physically handicapped. On the other hand, you have a definite need for English as a second language. How can we bring these two populations together?



***Programming for Special Populations and Measuring Results***  
**Shelley Quezada, Consultant, Library Services to the Unserved, Massachusetts Board of Library Commissioners**

1. Services to Special Populations

“Twelve years ago, I answered an ad in the Boston Globe for a position with the Massachusetts Board of Library Commissioners which had the intriguing title, ‘Consultant for Library Services to the Unserved’. I suspected that I would be working in providing services to people for whom English was not their first language. I was unfamiliar with issues concerning Adult Functional Illiteracy. However, this was at the time that A Nation At Risk had just been published and the beginning of a number of federal initiatives within the U. S. Department of Education, such as LSCA Title VI, targeting monies for literacy program development in libraries. There was considerable activity on the part of the National Coalition for Literacy. In fact, the American Library Association (ALA) had active representation on that Coalition, which included some of the people at this Forum.

“As recently as 1993, the National Adult Literacy Survey, the most significant survey of literacy to date, confirmed what many of us already knew: Upwards of 45 million adults in this country fall into a category where they have difficulty performing tasks such as understanding a prescription, completing a job application, using a map, or reading to their child. This is a chilling statistic in light of one significant finding that we already know: Whether a child was read to (or not) is one of the greatest predictors of a child’s success in school.

“As my own work evolved, I began taking on additional responsibilities, including serving as liaison to the institutionalized and incarcerated population. The trend toward deinstitutionalization means that more people are being released into the general population. And, they often end up in our public libraries as ‘homeless or indigent’ and create new challenges for us.

“Our one growth industry, of course is the prison system. However, as we have increased the number of inmates, try providing library programming when you are 145 percent over capacity. That increase in numbers has not been supported with resources, and, as a result, we have many librarians attempting to provide programs and services on limited budgets. Our librarians are frequently isolated from other institution staff and, since security is the main function, a library can be shut down at a moment’s notice.

“With the passage of the Americans with Disabilities Act (ADA), there has been greater awareness about the many issues facing people with disabilities. The blind or visually impaired, deaf or hearing impaired, and those with mobility or other impairments now have a tough law to back up their right to have access to library programs and services.

“In most states, the State Library Agency has provided guidelines for service, conducted workshops, and coordinated technical assistance in interpret the Act. However, the reality in many states is that our buildings are not all equally accessible and many do not have the complement of equipment necessary to provide accommodation in using these resources. Adequate signage, computer terminals at the appropriate height, a screen enlarger (such as Optelec), or devices which enhance speech (such as Phonic-Ear) should be in all facilities. In addition, TDD numbers should be available and published.

“In our state—this should be the same for all states—we should provide adaptive workstations in designated libraries so that all people have equal access. A critical concern today is in the area of Internet access and its move toward providing access to library collections, primarily through a graphical browser. When a blind person accesses a computer and modem and dials into a graphically-based site, perhaps at your library or another web site, when the computer reaches the image on the screen, the screen stops talking to them.

“Another issue of concern, bordering on a crisis in this country, is that, in spite of an increase in recording devices for the blind and in talking books, there is a decrease in the use of Braille —down from 50 percent usage to 12 percent. Yet, today, of the 30 percent of this country’s adult-blind population employed, 91 percent are active Braille users on a daily basis. This should be a concern for all of us who understand that Braille is the ‘medium of choice’ for the visually impaired. Many legally-blind people with partial sight prefer to use Braille because it allows them greater fluency than laboring with magnifying devices. Frank Kurt Cylke, Director of National Library Service, Library of Congress, states, ‘Braille uniquely provides a medium for blind individuals to read and write, the full definition of literacy.’ Braille is to blind users what conventional print is to those who read. Are you aware that of all the conventional print material available to sighted users, only 5 percent of all print material is ever recorded for the blind by the NLS? Currently, 15 Braille bills are under consideration at the state level which would require that Braille be taught in schools, just as reading is taught.

“Depending on how we choose to define ‘special populations’, they can be characterized as groups or individuals with the same right to use the library for whom the library does not mean much in their daily lives. It may just a place they pass by on their way to and from work.

## 2. What Are Their Needs?

“In 1996 I was barely out of library school, and one of my first ‘professional’ jobs was on the federal project, Bookmobile, which traveled to schools in Watts and East Los Angeles once a week. At that time, Watts was the well-known neighborhood razed to the ground during the 1960s riots.

“What image would you have of this community? I would not be surprised of the picture in your mind. It is probably of a place where there was turmoil, segregation by

race, and with a host of social problems. In fact, Watts was a place where residents have become consumers of a service; a service which depends upon their being a 'client.'

"According to a significant publication on community development, Building Communities from the Inside Out, published by the Center for Urban Affairs and Policy Research in Evanston, Illinois, many of us represent well-meaning social service organizations which develop programs to serve poor communities, guided by university research and supported with foundation or government funding. Ironically, these forces combine to create a wall of needs—a wall not built on hatred, but built on a desire to help.

"The Center for Urban Policy Research suggests that this approach to providing services in a given community is often based only on targeted 'needs assessment' exercises. Many people in community development call this a Needs Driven Dead-End. Thus, viewing communities as a nearly endless list of problems leads to fragmentation of efforts to find solutions, and that targeting resources, based on needs only, directs funding to service providers—not to residents, such as the users and special populations. Relying on this 'needs response' promotes survival strategies and does not ensure a development plan which targets a whole community.

"The alternative approach suggested is called Capacity Focused Development, often called 'Asset-Based' or 'Strengths Model'. This approach is grounded in evidence that significant community development takes place only when local community resources are mobilized. Individuals, associations, and institutions are the three major categories which make up an 'Asset-Based' community.

"The key to rebuilding comes in identifying and harnessing local assets and connecting them with one another in powerful ways, including working with the land, buildings, and infrastructure upon which the community rests.

"The first principle is that any strategy depends upon what is already present in the community, not what is absent. A development strategy depends upon agenda-building and problem-solving capacities of all local residents, associations, and institutions. And, it must be relationship-driven. The challenge is to build, and rebuild, relationships between and among local residents, local associations, and institutions.

### 3. Traditional Barriers

"In addition to 'needs-based' barriers, there are the following traditional barriers to participation in library service:

A. Physical Barriers. People cannot get in our doors. Or, if they gain access, there may be nothing for them. Public libraries should consider adaptive workstations with speech synthesizers and large print.

B. Public Awareness Barriers. Many people do not know, and, therefore, do not use, our libraries because they are unaware of many of our services.

- C. Cultural/Language Barriers. In San Francisco, Asian mothers were afraid to share information needed to fill out library cards because they thought it was part of a 'government plot' to obtain information about them.
- D. Institutional Barriers. Libraries consider themselves as neutral locations, but, in fact, many libraries are equated with the same institutional feel as schools.

"Fortunately, many excellent public libraries around the country are responding to these barriers in the following manner:

- Here in Washington, DC, staff of the Martin Luther King Library provide literacy training and family materials for incarcerated parents in a local jail.
- In Fort Worth, Texas, the public library offers programming in housing projects and conducts programs aimed at kids in gangs.
- In Scottsdale, Arizona, the public library provides 'Homework Help' at a Teen Suicide Prevention Center.
- The Chicago Public Library's 'Blue Skies for Library Kids Program' has developed a male-mentoring 'Read Aloud Program'.
- The Lawrence Public Library in Massachusetts involves children, principally from Spanish and Southeast Asian backgrounds, in a Family Science Program . This program targets young women, who are traditionally under-represented, pursuing science as a career. The program offers opportunities to observe women in other career settings, such as doctors and veterinarians.
- California, Arizona, and other states have published Fotonovelas in Spanish which demonstrates how a Spanish-speaking family uses the public library.
- The San Francisco Public Library has an active program reaching out to the Asian community to help them understand the concept of a free public library. This program uses bilingual library staff and has strong community input.
- The Decatur, Georgia, 'Project Horizons' provides library services to homeless shelters, including gift books, storytelling, and access to computers.

#### 4. Continuing Challenges for our Profession

"Finally, I would like to speak to some of the new and continuing challenges for the library profession in this area by posing some questions:

- A. Are we really viewing special populations for the contributions which they can make to the system?

- B. Are we merely creating 'special user niches' for the groups which one community developer called, 'Labeled People?' Do these special user niches inadvertently create subtle barriers to mainstreaming?
- C. Are we permitting the concept of mainstream library services to evolve and diversify?
- D. We have a growing group of latchkey children in our libraries. We can either look at this as either a problem or an opportunity. Are there conflicts in shared resources? For example, what do you do when the mainstream library user objects to the noise or talking of a literacy tutor and student? Not all libraries have special quiet areas where these kinds of activities can take place.
- E. Even within our profession there is an institutional resistance to certain kinds of programs which may seem outside the purview of mainstream library services. These programs, which have been suggested, often receive the response, 'But we are not a social services agency.'
- F. Technology has widened the gap between those who can read and those who cannot. How can the library community be part of the information revolution to ensure and promote the democratization of information technology?
- G. In my home state, the Commissioner for the Blind was successful in mobilizing the resources of three other states to challenge Microsoft on making WINDOWS 95 accessible in some way for people unable to use a graphical interface. How can we, as librarians, help shape what is being made available to us and which we offer to our patrons rather than conforming our services to products which someone has already developed?

##### 5. Powerful Impact of Technology in the Lives of Special Populations

"We have many examples of how emerging technology has helped serve our 'named populations,' such as accommodations in hardware, software, and CD ROM programs in other languages.

"Last year, in a Braille literacy project in Massachusetts, we received permission from New Readers Press to scan material from some beginning, adult, new reader titles into the computer using an Optical Character Reader, which were then turned into a file and translated into Grade I and II Braille, using the Duxbury Translator. Adult Braille readers did not have to jump from basal readers to full-adult texts. Finally, through the magic of technology, we can help bridge the gap between beginning material and difficult text.

"In the Hennepin County Library System, Minnesota, Gretchen Wronka described a project which placed Macintosh Performas with dial-in access to the library catalog in a number of remote sites. One site was a local apartment complex for residents living at or below the poverty level. Using a 'train-the-trainers model,' community members and apartment residents were trained in the use of equipment and software. Recently, the

children's librarian stopped by the apartment complex resource center and observed an enthusiastic 77-year old African American man accessing American history on a Smithsonian Institution CD-ROM. Until he was trained by the library staff, this man could not use a computer. Now, he is rapidly acquiring superb computer and research skills. His enthusiasm for the project has led him to help children in the housing complex with their homework. He has been asked to accompany the library staff person to a local paperback jobber to help select books of interest for the kids. Surely, Minnesota is on the right track with a program such as this!

“In February, while Congress was briefly debating and considering the merits of whether legal immigrants should be required to take an English test before coming to America, a group of adult learners in the Lawrence Public Library had just finished discussing an abridged version of Admissions Decisions: Who Should Apply? as part of the National Issues Forum Program. For this program, we had provided Internet accounts to these adult learners. After a lively discussion on the issue, they developed a resolution. Then, they sent an e-mail message to The White House detailing the resolution and expressing their feelings. It was a powerful moment. Rather, than some shapeless institution, the government was now a body with which they could communicate. These people had learned an important lesson: If you keep saying it over and over again enough times, eventually someone will listen. Just the previous month, these same students had taken the results of their session on ‘Child Care Decisions’ and written a joint letter to the Lawrence Eagle Tribune. I am happy to say they had the satisfaction of seeing it published on the editorial page.

“There are many stories about programs which work and are responsive to all library users, regardless of background. As library leaders, policy makers, directors of State Library Agencies, city libraries, and advocates for improved services, we have been presented with a welcome opportunity to begin working together, today and tomorrow, on some of these issues. Hopefully, this will be the beginning of a conversation which we can continue beyond these next few days.”

***Introduction of Discussion Group Chairs and Recorders***  
**David Penniman, Chair, Panel on Measuring Value of Library Services**

David Penniman, Chair, Panel on Measuring Value of Library Services, introduced the Discussion Group Chairs and Recorders and provided the following selected comments.

“Andrew Carnegie chose libraries as a means of social change because, in his words, ‘They give nothing for nothing. They only help those who help themselves.’ According to recent data, however, we are faced with a serious condition in many communities, where even those who wish to help themselves may not be able to in the manner Carnegie envisioned because of inadequate library facilities and/or resources. During the next few days, we will engaged in a process to see how information technology and special programming can be leveraged to help address this issue, especially within selected populations.

“The purpose of this year’s Forum, and stated in the handout material, is ‘to work toward further improvement of national data on libraries and information services for libraries of all types.’ We want to keep this in mind as we progress through our discussions. Even though we may focus on public or school libraries, we need to stay as broad as we can with regard to libraries of all types. The topic of this year’s Forum is: ‘the use of information technology and special programming to improve quality and equity of access for library services to special populations’. Special populations we will focus on are:

- Library Services to Educationally and/or Economically Disadvantaged
- (including literacy programs)
- Library Services to Multicultural Populations (including limited English-speaking)
- Library Services to Physically Handicapped
- Library Services to Rural and Rural/Remote Populations
- Library Services to Seniors
- Services to Businesses and Employers

“This morning it was pointed out that one group not specifically addressed is prison population; there may be others, as well, not specifically mentioned. Please make note of this special population, and any others, in your group discussions and be sure to include them in your work and recommendations.

“What are the objectives of the discussion groups?

- (1) To identify data that is not now collected but would be useful for policy development or research;

- (2) To select the most significant of those data elements for action; and
- (3) To develop action recommendations.”

Mr. Penniman reviewed the material sent to Forum participants and outlined suggested topics for group discussions:

1. Effective applications of information technology to (each of special population/group/services).
2. Effective applications of special programming for (each of special population/group/services),
3. Elements or factors in these separate or merged applications that have made them successful in terms of: (1) Greater use; (2) Increased equity of access; and (3) Service effectiveness.
4. Collection of data on these programs that will contribute to local, state, and national policy development and research.
5. Methods (including technological) of measuring outputs and values of above applications and developments.

Mr. Penniman continued, “One concern that has consumed my interest and resources for sometime is: How can we gain a better understanding of how investments in information services provide payoffs? Tomorrow you will hear from a panel of researchers on Measuring the Value of Library Services. Panelists are:

1. John Bertot, University of Maryland-Baltimore, Department of Information Systems;
2. Glen Holt, Executive Director, St. Louis Public Library;
3. Paul Kantor, Rutgers, School of Communication, Information and Library Studies;
4. Don King, University of Tennessee, Knoxville, School of Information Sciences; and
5. Bruce Kingma, Assistant Professor, Department of Economics, State University of New York, Albany.”

Mr. Penniman then introduced Group Chairs and Recorders and provided instructions for group discussions.

Group Discussions, Session I, were held from 11:15 to 12:15 p.m.



Mr. Paul Planchon, NCES Associate Commission, introduced the luncheon speaker, Lygeia Ricciardi, Policy Advisor, Office of Plans and Policy, Federal Communications Commission.

**Universal Service for Libraries Under the 1996 Telecommunications Act**  
**Lygeia Ricciardi, Policy Advisor, Office of Plans and Policy, Federal**  
**Communications Commission**

“It is an honor to speak to such a distinguished audience. I am pleased to represent the Federal Communications Commission (FCC) and, in particular, our Chairman, Reed Hundt, who is among the most committed public servants to the dissemination and the democratization of information.

“Libraries have occupied a position of central importance in our Nation since the early years. In 1800, President John Adams approved legislation that appropriated \$5,000 to purchase ‘such books as may be necessary for the use of the Congress’. The first library collection consisted of 740 volumes and 3 maps.

“After the British army burned the Library of Congress collection in 1814, Thomas Jefferson sold his own library of 6,487 volumes to the Library for \$23,940. His personal library was more than double the size of the original Library of Congress collection. Jefferson had encyclopedic interests, and his collection contained books on every subject. His concept of universality is the base for the comprehensive collecting policies of the Library of Congress.

“As Jefferson said, ‘Information is the currency of democracy’. If this is so, the so-called ‘Information Revolution’ provides us the opportunity to increase our riches at a rate unmatched since the invention of the printing press. This Information Revolution has given birth to the fax machine, cellular phone, personal computer, Internet, and World Wide Web.

“As technology evolves, public policy must keep pace with it. On February 8 of this year, President Clinton signed the Telecommunications Act of 1996 at the Library of Congress, symbolically linking our Nation’s greatest library, through the power of technology, to the success of our democracy, economy, and society. This is the first major telecommunications law in nearly 62 years. This new law turns the old law upside down. Before, government encouraged monopolies. Now, we encourage competition among all communications businesses. At the same time, the new law extends the public benefits of communications by emphasizing the importance of making modern communications available, accessible, and affordable to absolutely everyone.

“The Telecommunications Act of 1996 contains several ‘Universal Service Principles’—principles to guide the FCC in providing access for all Americans to the information tools of tomorrow. Among them—FCC must guarantee that:

- (1) quality communications service be available at just, reasonable, and affordable rates;
- (2) advanced service be available in all regions of the country;
- (3) low-income consumers and those in rural and high-cost areas have access to communications service, and
- (4) all schools, libraries, and health-care providers have access to advanced telecommunications services.

“In addition to these general guiding principles, there is a specific provision for which we owe thanks to Senators Snowe, Rockefeller, Exon, and Kerrey. The section they sponsored requires that telecommunications providers discount telecommunications services for schools and libraries to an ‘affordable’ rate. The FCC is now in the process of defining this discount, however, we need to answer such questions as:

- What does ‘affordable’ mean?
- Which technologies should be discounted? For example, just telephones? What about cable, wireless, or satellite technologies?
- What grade, or level, of service is appropriate?
- What mechanism(s) should be used to support Universal Service?

“We are well aware of the importance of our decisions. We know that a phone line can be a life-line, and that networked computers could bring the resources of every networked library in the world to any citizen. But we also know that much work lies between the present and the realization of this vision.

“There is a frightening gap in this Nation between the rich and the poor. A gap that could, in part, be bridged by information and knowledge—but not without the physical networks of communication. According to a recent FCC report, one out of 16 American households is without phone service. For households with incomes below \$15,000, more than 1 out of 10 is without phone service. And worse, 1 out of 8 households headed by an African-American, and 1 out of 7 headed by a Hispanic, is without phone service.

“Since connection to a network allows the unemployed to get back into the work force, the fact that nearly 11 percent of unemployed adults are without phones is especially disturbing. The availability of communications services, and the skills required to use them, are becoming increasingly important, not only for finding but for keeping work. Already more than half of the high-wage jobs in the United States require the use of networked computers. And jobs that require computer- use pay about 15 percent more, on average, than those that do not.

“Yet access to technology is by no means evenly spread. Although more than 50 percent of high-income families with children have computers at home, fewer than 5 percent of low-income families do. We must help people at the lower end of the economic spectrum to gain access to information technology outside of the home.

“The opportunity to succeed in our competitive information economy depends on technical literacy. As Education Secretary Richard Riley has said, ‘learning on-line must not become a new fault-line in American education.’ The Secretary’s words apply not only to the education of children, but to the ongoing education of all Americans, regardless of their status as old, young, disabled, rich, or poor.

“For every child and every citizen to have his or her fair chance to make the American dream come true, each must have access to the best information. The solution lies in our schools and in our libraries. Yet, only about 45 percent of public libraries, according to NCLIS’ recent findings, are currently linked to the Internet. And, of those, the majority offer Internet access only to their staff.

“The percentage of libraries with Internet connection has risen dramatically. In fact, it has more than doubled since 1994. We now have the opportunity to increase those numbers even more.

“We at the FCC will know that we have succeeded in our job if five years from now libraries and schools have become community communications hubs with access to the most advanced communications network in the world.

“The FCC is striving to bring the tremendous benefits of the ‘Information Revolution’ to everyone. We want you to know, ahead of time, what impact our actions are likely to have. We need your experience and knowledge. Help us. Stay informed. Read LearNet, an FCC page on the World Wide Web dedicated to issues impacting libraries and schools. LearNet is at ‘<http://www.fcc.gov/Learnnet.html>’. I have brought with me printouts of the LearNet page, which explain how you can participate in FCC proceedings.

“The opportunities of the Information Revolution are limitless. Let us do everything we can to make sure those opportunities are for all. Thank you.”

Tuesday, May 21, 1996

**SECTION II:  
PANEL ON MEASURING THE VALUE OF LIBRARY SERVICES**

Following Mr. Penniman's introduction of the panelists, John Bertot made his presentation.

**John Carlo Bertot, University of Maryland - Baltimore,  
Department of Information Systems**

"In terms of measuring the value of library services, there are a few assumptions that aid researchers: We know what to measure; we know how to measure it; and we know why we are measuring it.

"In knowing what to measure, one of our key assumptions is that we have identifiable elements and variables. In some ways, looking at electronic transactions is the easier side of things. The software is improving in terms of measuring the network traffic, that is: 1) How many documents are downloaded? 2) What is the overall bandwidth?; and 3) What is the amount of networking trafficking in all of these areas? The truth is that behind all of these questions there are some key elements missing in terms of actual value. This is partly because we do not yet have a new definition of value.

"I would argue that 'value' is something that the user determines. The follow-up to that is: 1) What, in fact, did they do with those documents? 2) How did they help? and 3) How did it make a difference? Those are the more qualitative aspects of data collection activity that are not very easy to obtain.

"In determining what to measure we need agreement on the 'unit of analysis.' One of the things that we found when looking at the Maryland Sailor Network is that defining the network, itself, becomes quite difficult. It is not just a 'network.' You have to determine what part of that network you are looking at: 1) Are you looking at the physical structure? 2) Are you looking at the backbone? 3) Are you looking at an individual PC? 4) What level of the network are you going to look at? and 5) What types of things are you going to measure within those areas?

"There are a whole range of issues within the network services, on-line data bases, and on-line data base services, that you may provide: 1) Who is managing the network? and 2) At what level?. Within each of these areas there is a different notion of value. In some sense, value is a moving target, and, it is getting harder to pin down. You have to define exactly what is 'value' within each of those areas.

“I want to reiterate the point that value is at the user level. The basic problem is to determine how to get the user level data on a national basis and have it standardized across all of the libraries that you measure.

“There is really an amazing level of complexity in the Sailor Network. Maryland provides some baseline Internet service, and every public library system in the State of Maryland is linked to Internet, at some level. However, individual library systems have added on to that in providing additional Internet-based services; some are even providing e-mail account to users. What Internet-level service are you going to measure? How are you going to count that nationally? As a result, you have multiple services.

“One terminal provides multiple services. Questions to be answered are: 1) Which services are you trying to track? and 2) How do you divide up the costs of the terminals for each of the services they provide? In our 1996 study we found that 30 percent of public libraries could not figure out how much of their operating expenditures went to ‘information technology’ alone. What percentage of the technology budget went to Internet-based services? As a result, you have to estimate percentages and overall costs.

“You need to know how frequently you want to collect data. You can do it monthly or annually. You have to standardize the collection. You have to have agreement on the data elements and the units of analysis. Everyone has to agree—the collection agency as well as those actually collecting the data in the field.

“One debate now is ‘urban versus rural libraries.’ Basically, we determined that anything under 25,000 population is rural. This was a quick way of looking at the urban/rural distinction, and, as it turned out, there was much controversy.

“In trying to determine costs, for example, cost per terminal for the service you are trying to provide, I do not think there is one good way right now. When we conducted our cost-model study, we tried to determine ‘cost elements’. There are, of course, hardware costs, software costs, planning costs, renovation costs, building costs, telecommunications costs, and so forth.

“One mistake made in our 1996 study was that when we asked how many libraries were connected to the Internet, we were talking about all of the different costs elements. What we really should have asked was: ‘When did you get your connection?’ Because, within that framework, there is the difference between ‘ongoing costs’ versus ‘initial costs.’ If you already have an OPAC system, and you have 100 different terminals hanging off that system that have been in use for the last five years, and you are providing text-based services to the Internet, there are really no additional costs for the hardware side of things or for providing Internet services. In some cases, it is only turning on a switch. Those are the kinds of things that we need to look at!

“In terms of methodologies, I have learned that determining quality is not necessarily a quantitative process. ‘Yes’ and ‘no’ questions are very broad, and you do not reach the level that you need in terms of value questions. When we ask, “Are you connected to the Internet in any way? and you say , ‘Yes’, there are about 200 questions I can think to ask underneath that.

“Finally, you have the local library at the one level that resides within a library system, within a local government system, within a state government system, and within the federal government system. Why are you collecting this data? For internal purposes? For informing the state? For informing your local government? For a national debate on libraries? In many ways, this is the first step to be addressed in terms of data collecting.

“On the bad news situation—our setting is a complex new frontier. We are not really sure which components we should measure. The patron community is very spread out, and it is no longer necessary to walk into a library to get services. The good news is, to some extent, we are able to track services more accurately through automatic data collection types of software that we can hang off of the servers and terminals.

“NCLIS took the lead by going ahead and doing the first national survey of public libraries and their use on the Internet. There really is a need for an on-going survey of this type. We can argue about what it is to collect on that survey, but, at some point, we have to get into institutionalized data collection activity. It is a moving target. It may change rapidly, and it must be flexible. But, at the same time, it must allow for ongoing data collection so we can do more longitudinal-types of collection to study the changes over the past few years. I think the FSCS network is probably the most logical choice to carry out that task.

“In a pitch for my career with the research communities, I think skills in the electronic services environment are needed, and that falls on the purview of the research community to provide those skills.

**Glen Holt, Executive Director, St. Louis Public Library**

“My thanks for being given the opportunity to talk to this group this morning. I also want to thank John Bertot for his paper, which provided a wonderful set-up for my own presentation.

“Before beginning my substantive comments, I want to make four introductory comments:

“First, my presentation this morning is taken from a soon-to-be published paper entitled, *A Framework for Evaluating Public Investment in Urban Libraries*, Bottom Line, 9:4 (Summer 1996). This paper is exactly what its title suggests—a framework. We still have to develop measurements. This morning’s talk is derived primarily from this Framework paper.

“Second, the rationale for this research appears under my authorship as *Something More than Soundbites: Communicating Value to Library Constituencies*, Bottom Line, 9:3 (Spring 1966). A couple of my comments will be drawn from this paper.

“Third, as soon as the ‘Framework’ publication appears in print, the entire piece will be electronically mounted on the MCB Press homepage and the Urban Libraries Council homepage, and the full text can be downloaded from either location.

“Fourth, the project on which I am working has two co-authors: Donald Elliott, Professor of Economics, and Christopher Dussold, a Lecturer in Economics, both in the Department of Economics at Southern Illinois University at Edwardsville. I publicly state my gratitude for their willingness to collaborate with me. I would not have attempted a library benefits valuation project without the contributions of able economic co-researchers.

“Let me tell you why I became interested in our current research project.

“I think public libraries need better tools to convey their value to their constituents than the ‘warm and fuzzies’ they mostly use now. Some constituents—among whom are public officials and corporate leaders—want a financial or dollar-value sense of the payback from public investment in libraries. Our research project is designed to create a tool which can be used to assess the benefits of public expenditure on libraries. I believe the result will be to increase the credibility of my public library and public libraries, generally.

“I have seen the successes which cultural institutions can have in utilizing such value-discerning tools. Through a succession of economic-impact studies, St. Louis area museums have been able to convey their positive effect on their regional economy. Their

statements have helped establish economic credibility. Libraries should have the same kind of tools.

“Given that positive experience, why have Professor Elliott and I chosen to use cost-benefit analysis rather than economic-impact analysis to ascertain library benefits? For those who know the two methodologies, the reason is basic: Economic impact analysis does not work well in describing the economic effects of public libraries. Public institutions yield high-economic impact only if they attract investment or expenditure from outside the region. Nationally known museums, for example, attract out-of-town visitors who spend at area retail and hospitality institutions. Such out-of-region ‘income’ yields high-economic impact. Because public libraries are primarily ‘locale-serving’, and they do not attract ‘income’ from outside the region; their operation usually does not produce a high-economic impact.

“Cost benefit analysis does a better job of describing the economic effects of public library operation. It already has been used to measure the benefits of similar kinds of locale—serving institutions, colleges, schools, swimming pools, and reading programs. These methodologies are established, and those studying public libraries can use this literature to hurry along the determination of library benefits.

“Cost benefit calculations also match nicely in the way taxpayers think: If you pay more taxes, you should get more benefits! In the focus groups that the St. Louis Public Library (SLPL) has been conducting for several years, participants have been almost eager to assign benefit values to library services. And, cost-benefit analysis is flexible: It can be adapted to focus on specific library functions or individual branches, or it can be aggregated to focus on the costs and benefits of the public library as a whole.

“Finally, cost-benefit analysis matches well with a prior body of research information on public libraries. In the cost-benefit formulation which Professor Elliott and I have established, the elements we will be analyzing are: 1) resources; 2) capability or quality; 3) utilization; and (4) beneficial effects or value. This cost-benefit analysis fits nicely in the work that library professionals have been doing for years to determine their costs and to measure their utilization, even though the latter measure has seldom been in economic terms. Librarians also have strong non-quantitative impressions regarding both capability and the value of their services.

“Can those qualitative impressions of professionals and the public be transformed into measurable quantitative benefits? “The answer is yes, but the work will be difficult. Our measurement techniques will be the same ones that John Bertot talked about. We know it is possible to measure the private benefits which people derive from using the library. If a swimming pool developer can calculate that individuals obtain ‘X’ value from using the facility, then a public library should be able to get users to assign ‘Y’ value to the hundreds of fiction books they check out and read each year.



“Measuring public benefits is harder but not impossible. If juveniles become more knowledgeable and literate because of their library use, they are less likely to be unemployed and more likely to earn and to vote. These are public benefits. People are willing to set values on such services if they are given appropriate information and choices.

“This value setting will be an extension of work already underway in St. Louis. A good deal of the work done to determine the costs of its services has been conducted by the SLPL staff. Library staff have also accumulated significant detail on who uses which services. In addition, the library staff and consultants have experience in getting focus groups of users to talk about the values of library use.

“Within the context of this whole research experience, user focus groups will be asked questions about economic value. The results of those focus groups can be used in appropriately designed surveys by which other users—and non-users—can be asked questions about the economic value they are willing to set on library services.

“There will be other research questions as well, such as: 1) What estimating system should be used to accumulate value? 2) What about discount rates? and 3) What formulae should be used to establish indirect external benefits after having completed the measurement of direct benefits?

“As you can see, our project’s study efforts will start very simply. We are ready to do pilot measurements. We expect quick results, but we will need to replicate studies in St. Louis and elsewhere. Our studies will be built on established social science and economic literature, and on SLPL’s previous research experiences. We will reinvent no wheels that already run smoothly!

“Professor Elliott and I both are methodological conservatives. We expect our first outcomes to be cruder than we would like. We expect that methodological refinements and replications of value testing in St. Louis and elsewhere will provide more accurate pictures of the benefits to be derived both from the aggregate of library services and from specified individual services.

“With a grant from the Public Library Association, the next phase of our research will involve initial cost-benefit valuations of two services: 1) Library basic literacy services for youth, and 2) the library’s business services. The reason for our interest in both services is derived from SLPL’s operating situation.

“A single statistic illustrates our interest in the impact of basic literacy. This past year, the St. Louis Public Schools graduated 1,050 seniors. SLPL user statistics, meanwhile, note the existence of 973 17-year olds who are regular library users. Quite obviously, all of us connected with SLPL Youth Services wonder if there is a correlation between the success of those seniors who graduated high school and continued library

card holding, There are either equally fascinating library-use/children's-success relationships that seem worth exploring.

“The Library’s interest in business services flows from an equally intriguing relationship. Sixty-six percent of all library income is derived from property taxes associated with businesses, not from residences. SLPL provides many business services in return, especially to small businesses but to large corporations as well. Exploring the relationship between library use and business success will be just as intriguing as that between library use and school success.

“What are the policy implications of the proposed research? “

First, and most importantly, we hope to demonstrate the social return on investment in public libraries. Such a calculation can have wide implications and can make arguments for continuing and/or improved public and philanthropic funding.

“Second, we believe that cost-benefit analysis may be useful in defining what can be called ‘the edge of service’. In the 21st century, it seems unlikely that public libraries will be able to do everything for everybody. Instead, policy makers may have to begin to self-consciously decide which services provide the most benefits and which need to be dropped because their benefits do not match the income. If resource constraints increase, how will library leaders decide ‘the edges of their service’? Will it be simply arbitrary? Or, will some economic formulation be part of the decision-making equation?

“I do not want you to think that I would ever use a cost-benefit formulation as the sole reason for increasing or cutting a service. Public library administrators have to decide service levels based on many factors, including economics. To put the matter simply, I am not one of those professionals who is searching for the ultimate set of statistics that will take most of the risk out of policy making. On the other hand, not to utilize any set of statistical or econometric measures which help inform policy is like using only half a brain to make a service decision. Statistics and tools of economic measurement should not drive policy making, but they can help establish a powerful framework for policy.

“Cost-benefit analysis is not going to be a magic bullet, nor are we going to produce elegant public-library cost-benefit formulations at our first attempt. Time and refinement will be required to obtain that which will be meaningful from a policy standpoint. By its very nature, social science moves forward in incremental steps. Professor Elliott and I are beginning to take one-in-a-series of steps in the public library field.

“Is this exercise worthwhile? My answer is similar to a previous reply by Don King. In 1982, Professor Herbert White, whom I respect enormously for his conceptual and methodological contributions to library and information science, wrote, ‘I see no real

reason for cost-benefit determination because the premise that libraries are good is still widely accepted.’

“Does anybody want to stand by that comment today when attempting to get things accomplished in Washington, DC?”

“Times have changed, and cost-benefit analysis has a place in library and information science.”

**Paul Kantor, Rutgers, School of Communication, Information and Library Studies**

“This has been an extraordinarily stimulating conference. The talks we have heard so far, have hit very important issues. I plan to go a little more deeply into one that I might prefer to avoid. I will describe my talk as ‘value in libraries’ and it is based upon research that I did in collaboration with Tefko Saracevic and a number of other people at Rutgers University, with support by the Council on Library Resources. This 300-page report is available in paper for \$35.00 or over the Internet for free.  
<ftp://soils.rutgers.edu/pub/APLab/cost.value.study>.”

“I have come to believe that the Internet is, in some sense, the ‘big public library’ for the entire Nation. The study I will talk about was motivated by the belief that we have to find ways to value libraries today which are going to persist and make sense across this substantial transformation from paper-based, visit-based, to electronic-based, outreach-based. I think that the one element to remain unchanged during that transformation is the impact on users.

“My own career in studying libraries has gradually worked across the chain from input through processing in libraries, to outputs in libraries, and, now, to the impact on users. In a sense, when we study processes, we ask how the library is doing what it does? When we study outputs, we ask how much is the library doing what it does?

“I think of the measurements at various stages in this as either being measurements of quality or quantity, or sometimes, both. When you are dealing with the inputs to a library in terms of personnel, there are quantity measures that may not show up—such as amount of training. With processes, it becomes very natural to talk about the quality of the process, such as success rates, turnover, and so forth. When you look at the outputs, it becomes very natural to talk about the quantity. When looking at the impact of uses, you deal with both quantity and quality. There is some qualitative phenomenon that occurs when the user is affected by what happens at the library.

“Our particular study was conducted at five major research libraries, looking at about 20 different services within the libraries. We conducted more than 500 interviews with users. Our goal was to try to use uniform methodology across these very diverse services, ranging from the entire art collection at one library to a specialized electronic record service at another. One of the results of the survey was a very large manual, a kind of do-it-yourself manual.

“Metrology, applied to measuring libraries, asks the question, ‘How good is the library?’ Taxonomy, which we do not talk about very often, asks, ‘How is the library good?’ We found that we are not really breaking totally new ground. The oldest reference we found was Aristotle, the ancient Greek philosopher, who pointed out that the value of a thing is of two kinds—its value in use and its value in exchange. For libraries and information services of all kinds, value and use are proper foci.

“We also made a brief diversion. We went into a philosophical study of value called, ‘Axiology.’ We found a list of some 20 kinds of value, of which I will summarize only two: 1) intrinsic value, and 2) instrumental value. We say that something has intrinsic value when it is just good for its own sake. Instrumental value is the value that something has when it helps you to do something else that you have chosen to do.

“It is also useful to distinguish between ‘information’ and ‘information services’. In thinking about information, there is a rather-well developed economic theory of the value of information which says, ‘The value of the information is the difference between how well you do when you have it, and how well you do if you do not have it.’ We cannot, at least yet, apply that measure to libraries. In thinking about information services, we recognize that people go through three different important steps to get to the information. The first we call the ‘acquisition’ of the information. The second we call ‘cognition’. Something has to happen inside your own head. If you think about it, you are somehow transformed by the information that you have obtained. And, then in some cases there is an ‘application’—but, not always. If what you get from the libraries are detective stories, you read them. There is some cognitive process, but you are done. You do not actually go out and solve any crimes yourself.

“Before we could talk about those processes, we had to look at libraries to learn as much as possible about the impact of these information services. We took an approach which in social sciences is called ‘grounded theory.’ What that means is: ‘Look at things before you make up your mind.’ We did that with the 500+ interviews. We interviewed people by asking them two-part questions: ‘What kind of score would you give to the library on your last visit?’ This did not tell us very much. We asked, ‘Why did you give that score?’ This told us quite a lot. Then, we asked the people: ‘What was the reason or purpose of the project that brought you to the library in the first place?’ Finally, we asked: ‘What was the impact on what you got from the library for the project or research?’

“It turns out that when you ask people these kinds of things, they do not respond to the particular question that you asked. Rather, they tell you the whole story. We taped and transcribed the interviews. Many hours were spent reading the transcripts, and in shaping the interviews into groups. We took those results and shaped them even more to see if they could make sense. What seemed to emerge is that you can make a very broad, high-level grouping of the responses that people give to you in terms of ‘reasons for use’, ‘interactions’, and ‘results’.

“The details of both our methodology and the resulting taxonomy will appear in two papers in JASIS, sometime in 1996 or 1997.

“We do not claim that this taxonomy will describe all users of every library. We are sure that for many library settings, other terms, concepts, and descriptions will arise. But, we are very comfortable in saying that this methodology can be applied, and it can be used to find out how the library is good to the users. Transparencies show just a

typical interaction might be, 'I searched the CD-ROM.' The typical kind of result might be, 'How I wrote my paper.'

"All in all, we feel that we have a new beginning. The question, 'How is the library good?' should be preceded by the question, 'How good is the library?' because it defines the scales and dimensions along which we can actually communicate with the libraries and their users. It may turn out that money is just not a very good thing to question them about. In fact, as one side question, we asked: 'Have you ever paid for the information services?' Most of the users replied that they never had.

"To bring this down to the focus of this particular Forum and propose an answer to the question, 'What should be asked of libraries when they are surveyed?', I think that we ought to begin to ask, 'On what terms do patrons value your services?'

"Personally, I am extremely interested in the impacts of technology, and I think the corresponding questions are:

1. Are you providing technologies to your patrons?
2. How does this affect you?
3. Are you projecting your services, and possibly even equipment, beyond the walls?  
and
4. How do your users value this extended service?

I would say that anecdotes do not always sway the board, but they certainly help understand what is being talked about. A taxonomy of value brings order and substance to anecdotal results."

**Don King, University of Tennessee, Knoxville, School of Information Sciences**

“Thank you for inviting me here today.

Having looked at the value of information, starting back in 1968, and as a result of numerous studies, we began to study the value of libraries. Over the years we have built a framework that is useful for examining the economics of libraries of all types. Very briefly, I would like to go over this framework.

“This framework has two dimensions. One dimension deals with the level of service being looked at. In other words, you can apply the framework to looking at resources, such as staff and equipment. Or, you can look at it as specific services or from the perspective of the entire library.

“The second perspective deals with gathering information that could be useful from a number of different perspectives. Certainly, one has to look at it from the perspective of the users and from a higher level, from the organization’s standpoint, whether that be the community served by public library or aggregated up to industry and society.

“There are basically five measuring factors one might study. One has to do with the input to the services—the application of resources necessary for library services. (Resources being such things as staff, space, equipment, supplies, and so forth.) Then you can measure those in terms of the amount of resources involved, or you can put a common unit on those resources. And, you can put a cost to space, equipment, supplies, and the like. Those are all measures of input one should consider as well as the attributes that will have an impact.

“We like to think of outputs in terms of the quantities of output of the services and also the attributes of the outputs you are charging for the services, such as the price, quality, timeliness, availability, and accessibility. In a sense, some people consider those attributes as being the value of the services.

“The first measuring tool has to do with the usage of the services. The amount of use and non-use can be measured by looking at the factors that affect use and non-use. There are alternative ways of gathering that information, and people will choose whether they use the library or an alternative choice. And, one should recognize that alternative choices do exist.

“A second measuring tool has to do with the purpose of use for public libraries.

“A third measuring unit has to do with getting some assessment of the importance and satisfaction with specific attributes of those services.

“Awareness is a big issue. I am always flabbergasted by the lack of awareness of the user and potential user of the services being provided.

“Then we go to the outcomes. In looking at the outcomes in ‘special’ libraries, we find that using the information provided by the library results in saving time, improving productivity, improving quality of work, improving timeliness of work, achieving organization, and so forth. We have a different set of outcomes that we use in ‘public’ libraries.

“The fifth measure is the number of people served in the community. The outcome measure is designed to calculate cost per-capita.

“One problem has been that the measures, by themselves, do not have much use. It is really the relationship of the measure that begins to tell you something about the usefulness and value of libraries. So, we developed a series of ‘derive makers’ which relate the input to the outputs. We call that ‘performance’ because that is something you can control within the libraries. Obviously, unit-costs are one measure of performance. Another measure is the productivity of staff, for example, the output divided by the number of hours necessary to provide the services. It is also useful to look at performance in light of the attribute because you find that you provide better services in terms of quality, timeliness, availability, and/or accessibility. That has an impact on the cost, and you can look at the unit-cost in light of the attribute. So, we always try to do this as well.

“Then we relate the output, particularly in regard to the attribute, and the extent to which those favorable attributes have an affect on demand—that is, the extent to which the library services are used. We want to think ‘usage’ in terms of the use of the information, not necessarily the use of the service.

“Then you can begin to relate the outputs, particularly the attributes of the output and the extended usage. You always see a high correlation between the attributes and the extent to which the library services are used. If you begin to do this, then you begin to say, ‘If I get better equipment and staff it will cost me more, but I know that we are going to get higher attributes and, therefore, more use out of the services’. That finding has some bearing on justifying the budget and resources.

“We also measure the cost against the extent to which the services and the information is used. Then, we look at the impact relating to the outcome of the services. You can then look at the value in terms of the consequences of having used that information.

“In ‘special’ libraries, in particular, we are able to quantify the fact that the more people use information, the greater their productivity.



“The final kind of measure we have found useful is cost-benefit. When I first started looking at value, I really looked in terms of measuring the costs against the outcome of the services. The way I look at cost-benefit now is to look at the library, or any of its services, against some alternative to that library or service. If the comparison is favorable, I look at that as being a benefit. If the comparison is unfavorable, I consider that to be a cost. This is a very, very useful way of measuring.

“Oftentimes, we find that people are willing to indicate that if they did not have the needed service available in their library, they would go to an alternative source to get it and are willing to make a rough estimate for the cost of that alternative. We have been able to do this in ‘special’ and ‘public’ library environments. Thank you.”

**Bruce R. Kingma, Associate Professor, School of Information Science and Policy,  
Department of Economics, University at Albany, State University of New York**

“I am currently working on two projects which relate to the measurement of the benefits and costs of library services. The four speakers before me—John Bartow, Donald King, Glen Holt, and Paul Kantor—provided good examples of the value of cost-benefit analysis in library and information science research. As an economist, I feel strongly that economic analysis is an important tool in measuring the value of library services.

“In cost-benefit analysis, costs are relatively easy to calculate. Costs typically involve summing library expenditures on a particular project or in a cost center. A percentage of overhead costs may be added to account for managerial time spent on the project or service. Costs may also involve measuring the opportunity cost to patrons for using a particular library service.

“Calculating benefits is more difficult, particularly in a library setting. Economists measure benefit using the demand for a good or service. If a service is provided, customers or patrons will be willing to pay a given amount for that good or service depending on the benefit they anticipate deriving from it. For example, one way to measure the benefit of health and safety classes offered by the American Red Cross is to measure the demand or willingness to pay for these classes. Given data on price, number of students, and number of classes, an economist can measure the benefit of these classes by estimating student demand. This information can then be used to determine what price the American Red Cross may want to charge students in order to maximize the benefit while collecting sufficient revenue to cover the costs to provide these classes.

“Measuring the benefit from goods or services provided by a library is more difficult. Typically, calculating the benefit from a service is not meant to determine a price to charge for the service in order to cover costs; instead, it is meant to illustrate that there is some measurable value to providing the service. Measuring the value of a library service may be necessary to convince a government agency director, a library funder, or donor that the library should provide this worthwhile project. However, without information on the willingness to pay a price charged library patrons, it is a difficult task to measure the benefits derived from library services. Data on how much patrons use the library and the opportunity cost of patrons' time can be used as a proxy for the willingness to pay or value of library services.

“I have completed two research projects that provide examples of cost-benefit analysis within a library setting. The first project, 'The Economics of Access Versus Ownership in Academic Libraries,' was funded by the Council on Library Resources. This project was in collaboration with the State University of New York Libraries at Albany, Binghamton, Buffalo, and Stony Brook. The complete results of this project can be found in The Economics of Access versus Ownership, Haworth Press (1996). This project calculated the cost-efficiency of providing patron access to scholarly journal articles at an

academic library via purchasing a journal subscription versus providing access via interlibrary loan.

“Previous research on the economics of access versus ownership calculated the costs of a journal subscription, shelf space, and the cost of staff time to catalogue, bind, and re-shelf the journal. The costs of supplies and labor to provide access via interlibrary loan has also been calculated by other researchers. However, previous research failed to include the cost and benefits to patrons of access versus ownership. Providing access to journal articles by interlibrary loan implies a patron must wait a few hours or a few weeks to access the information. This project calculated the 'opportunity cost' to patrons of having to wait for access to a journal article provided by interlibrary loan.

“Patrons were surveyed about their willingness to pay for immediate access to a journal article. Their response to this survey was used to calculate the opportunity costs of their time spent waiting for delivery.

“Surveying patrons about their willingness to pay for a library service is difficult. Patrons cannot be asked how much they are willing to pay for a service since their responses may be an inaccurate estimate of what they are truly willing to pay. Patrons may respond with a low-willingness to pay if they believe their response may be used to implement fees for the service. Likewise, patrons may respond with a high-willingness to pay if they believe their response may be used to determine the benefit received from a service and influence whether the service will continue to be offered. In this project, a carefully-constructed survey was essential to accurately measure patrons' opportunity cost of time waiting for access to journal articles.

“On average, patrons were willing to pay \$2.55 to have immediate access to a journal article. This number, along with numbers on the financial cost of providing interlibrary loan and journal subscriptions, can be used to measure the economic cost of providing access to journal articles by interlibrary loan versus a journal subscription. This information, along with data on the use and subscription price of journal subscriptions, can be used by academic libraries to determine the most cost-efficient method of access to scholarly information.

“Data on pricing and use collected at the University Libraries which participated in the study was used to make recommendations to these libraries about which subscriptions to retain and/or cancel. For many high-price and low-use journal subscriptions it was more economically efficient to provide access by interlibrary loan than journal subscriptions. Many of the techniques of cost-benefit analysis used in this study can be found in The Economics of Information: A Guide to Cost-Benefit Analysis, Libraries Unlimited, (1996).

“A second example of economic analysis applied to libraries is research on entrepreneurship in public libraries and measuring the impact of new streams of revenues on more traditional local tax support. This project is in collaboration with the American

Library Association and the Mandel Center for Nonprofit Organizations at Case Western Reserve University. Funding for this project is provided by the Kellogg Foundation.

“This research examines non-tax sources of revenue for public libraries, including donations, bequests, sales, and fines, and its effect on financial support from local tax revenues. It is a well-known result in the economics literature that an increase in revenues from government sources for nonprofit organizations may result in a decrease in charitable contributions. This research examines the opposite effect—the effect of a change in revenues from other sources on government revenues—for public libraries. More importantly, this research examines the strategies public library directors can employ to insure that revenues gained from donations, sales, and bequests do not adversely effect revenues from local government sources.

“Data from public libraries in Ohio, Minnesota, and New York were used to determine the amount of support these libraries receive from tax and various non-tax sources. Final results of this project are not yet available, however, preliminary results suggest that there exists a positive relationship between some non-tax sources of revenue and local tax revenues. This effect holds constant other variables including population, type of library, and the value of local taxable property.

“The second stage of this project is to visit the public libraries which are, and those which are not, successful at raising revenues from entrepreneurial sources. These site visits will determine the differences in library management and supporting groups, such as friends of libraries and library foundations, between libraries which are successful in raising revenues from entrepreneurial sources and those which are not.

“This research and the other research described in this session illustrates the usefulness of economic analysis applied to topics in library and information science. However, valid, empirical research requires accurate data.”

## Panel Discussion

Joan Challinor asked, "Bruce, how did the subscribers arrive at the \$2.55 value?" Bruce Kingma responded, "We surveyed all of the interlibrary loan patrons, and, as I said before, it is extremely important how to ask the right question. Actually, the survey was completed a couple of years earlier by some researchers who asked, basically, 'How much would you pay for this?' I think that is the wrong way to ask that question. What we asked them, in a couple of different ways, is, 'If you had to wait for this article from interlibrary loan or if we implemented a priority service that would provide it within an hour, how much would you be willing to pay?' As though, 'Here is a carrot for you.' We came pretty close to getting an estimate of the value they placed on having immediate access. Recognize, too, that the \$2.55 is an average value."

Joan Challinor: "What do you do about the people who say that if they did not get it from the library, they would not get it at all, and, they would not really care all that much? In other words, the value is the existence of the library, and there is no actual value." Bruce Kingma: "It is not the value of the information. It is the value of immediate access versus waiting two weeks. We are not saying you are not going to get it. The \$2.55 is not the value of the information, it is the value of the opportunity-cost of waiting two weeks." Don King responded: "What Bruce is measuring is really the value of the attribute of the timeliness of response. Another way to do that is to look at all of the attributes of the interlibrary loan and document delivery in terms of speed of response, the quality of the photocopying, and so forth, and do a conjoint measurement in order to determine the relative value of each of those different attributes."

David Penniman asked, "Can you give a layman definition of conjoint? It is a marketing research tool that looks at different attributes, speed of delivery, quality, and the like, and using a statistical technique where you get people to make choices about the different levels of those attributes. You force people to say, 'I would prefer a price over the quality or speed of delivery.'" Paul Kantor replied, "There is a paper in the library literature, College and Research Libraries by Greg Crawford, on trying to apply the conjoint analysis that Don King brought into the field."

Sam Memberg asked, "Do you have a cost-benefit analysis, which is not negative, regarding staff access to the Internet?" Glen Holt replied, "There is a study of making books available electronically at Columbia University. We asked the people: 1) With regard to such and such a book, will you access it in paper or on-line? 2) Which way is most productive? and 3) Which enables you to do better quality work? We are just beginning to get a toe-hold. We are not ready to ask, 'How much better?' yet. We are waiting to see if it is better at all."

Don King responded, "We have to think of any cost-benefit analysis in terms of the information that is derived from the service. The Internet is only as good as the information it provides. We must constantly think of it in those terms. It is a tool." John Bertot then added, "In the public library setting, access to the Internet is relatively new."

We really are at the anecdotal stage. I am not as optimistic in terms of being able to assess cost-benefit analysis in the electronic environment at this point. An academic setting might be different. As an assistant professor, I know what journals I like to use and what those subscriptions costs. But, in a public library setting, I have yet to run across a patron who could immediately say, 'Time Magazine costs X amount, and this is what it is worth for me to have it in two days from now.' I think the electronic environment will dramatically change our expectations of what is 'immediacy' and what is 'timeliness.'"

Glen Holt suggested, "Before you decide whether or not the staff is getting value out of it, maybe libraries ought to invest in staff computing? I know you are not being negative, but we have to be an exception to the rule. We invest in staff computing before we invest in the Internet. Forty percent of all of the computers in our system (we have 415 in our system) are physically for staff use. When you invest at that level and start conceptualizing the value of Internet, using it as a way of communicating reference questions, I am suggesting that I would be real careful about measuring apples and oranges. I think the Internet system that we are creating for staff support is a different system than the Internet. I would think of the Internet access as part of that system only in the sense of reference help, e-mail communications, and so forth."

Sam Memberg asked, "Are you using it specifically for Internet?"

David Penniman stated, "Glen, I think the audience would be interested in some background on how you employ the GIS system to help you make some strategic decisions." Glen Holt replied, "We established a tract and sub-tract information system for our community. We aligned this against activity of the library user so we can match library use against tract data and show that geographically. This gives us pockets of use. We have what we call a full-patron equivalent, an invisible human being that runs around from place to place. What I am suggesting is that the GIS system we employ is an enormous policy tool. It is also an economic-development tool for people in the community, so it serves two principle functions. I am not being defensive about GIS. Fifteen percent of our total use comes out of a virtual library. We deliver actively to 100 elderly sites; we deliver actively to 200 day-care sites."

Walt Terrie asked, "Most of the public libraries in the country need to do the kinds of things that you are talking about but are probably not able to for many reasons. How can the work you do be generalized in order to assist a library that cannot afford to do this to make a case? For instance, the one thing they do frequently know is inputs; that may be all they know." Don King responded, "Most of these studies are not public yet. There are enormous studies, and they are all going to go away because they are all done individually. One of the recommendations that Sam Memberg and Joe Shubert came up with is to identify this information and pull it all together. I would like to do that, if I can."

Paul Kantor then responded, "Since Don King has locked in his vaults more data on this than the rest of us will ever see, he knows better than the rest of us that it would be hopeless to try to claim that because my library spends 'X' dollars and so did another library across the country, therefore, we are having just as much impact on our community. We find enormous variations in the relation between any input and output. I do not think there is going to be a magic bullet which says, 'If all you are measuring right now is the turnstile count at the door, that can be translated into a full picture of your impact to a community.' It just ain't so. The question is, 'Can these things that we do at preposterously high costs, on an individual study basis, be turned into something that you can do in the privacy of your home?' That means really thinking about a certain kind of teaching; not the kind of teaching done in the classroom, but practical teaching transferring certain amount of skills and know-how. One technique, of course, is to write a 'how to do it manual.' I earned a relatively good living for a number of years as a consultant by having written 'how to do it' manuals, and then I got paid to go out and read it to people because the manual did not really explain how to do it. If we are going to do this, we have to develop techniques that are learner-friendly and make use of newer technologies. For example, I cannot think of a better way to teach focus-group techniques than to have a short video showing how to do Discussion Groups badly.

"Again, this is a project for the public good and so the generation of these materials would have to be financed on speculation because these materials by themselves will not produce the answers or information about any particular library."

Peter Young asked, "I am curious if any of the panelists would like to take on the task of measuring the value of library services within the macro of looking at 'information services and publishing' in general, especially with interaction with electronic networking?" In response, Don King stated, "Within the field of science, I have tried to do that. I received a small grant from the Special Libraries Association to look into electronic publishing and how it will affect the communication process. I do not know anyone that is trying to do that within the public library environment."

Paul Kantor added, "It is very important to understand that the public library function is changing. Much of the value that public libraries provide to their community is going to be in terms of making that 'Internet-thing' of greater value to the local community. The library will be maintaining local resources for the local community because no one else cares to and providing, through various kinds of finding aids, the kind of guidance that, in the past, was basically provided by buying the right books and not the wrong books. If libraries do not identify this as the 21st century definition of what it means to be a library, then people are going to start stepping over our bodies. As Don King said, 'What they really want is the information'."

Helene Yurth asked, "Paul Kantor mentioned that we learned from President Reagan that power of anecdotes is proven. I think we also learned from him that to repeat an idea over and over again at every opportunity it can become to be an accepted idea. It seems that, as a profession, we have recognized that we need to have more time for

measurement and evaluation. But, at the same time, we seem to be adopting an apologetic stance about not stopping that. If we cannot prove our value, we cannot expect anyone to value us. I wonder if that is a problem? Can we not be improving our analysis at the same time that we maintain the position that libraries are important and valuable, just because they are?"

Glen Holt replied, "We should do everything possible to demonstrate that libraries are winners. The language of winning is a language that Ronald Reagan held a 'teflon-coated patent' on for years and years. He taught people how to communicate. I think that is one important step. My reason for getting into cost-benefit analysis was a very personal one. I had some very conservative people whom I was using to help raise income that is not publicly supported because we are trying to increase that part of the revenue that the public cannot, or will not, provide for us. And, those people are not influenced by 'warm and fuzzies'.

"I used to do a lot of work with Fritz Machlup, and he argues very persuasively that you cannot measure value. The problem is that in 'real life' you have to begin to pull together information that is persuasive for the people who fund and use your services. You have to have some indicators that will help in the funding process."

David Penniman added, "Obviously, you do not want to discount the value of the anecdotal information. Don King and José-Marie Griffith, and I am sure others, have developed some techniques for systematically collecting anecdotal information. There are techniques for turning it into quantitative data."

Helene Yurth then responded, "You do not see it as an exclusive thing, but it does seem that we adopting this stance and that we are apologetic about ourselves."

Don King added, "In the special library environment, we observed that they were collecting anecdotal information. The problem is that those instances are fairly rare. But, in a statistical way, if you use critical incidence method you can get people to indicate how often those things do occur, and, sometimes, they will provide an estimate of value. About one percent of the usages of libraries result in some kind of savings, from \$10.00 to \$50,000. You can look at it statistically."

The panel discussion ended at 10:30 a.m.



## SECTION III: SUMMARY OF GROUP DISCUSSION THEMES AND QUESTIONS

David Penniman, Chair, Panel on Measuring Value of Library Services

Three underlying themes in the group discussions were detected. These themes are further defined by the questions listed below:

### *Theme 1: Understanding Measurement*

- “Why measure at all?” or “What is the penalty of not measuring?”
- “What do measures mean?” There is a need for clear definitions.
- “How can we develop standards for measurement building on the question of what do these measures mean?”
- “Can such standards be specific enough to cover the interests/requirements of special user needs groups?”
- “Who needs the data/measures (e.g., library staff, directors, funders, trustees, patrons, local, state, federal decision makers, etc.) and what measures do they need?”
- How can we improve the means of collecting data? (Electronically based surveys were mentioned. [See later reference to making data collection easier at the local level.]

### *Theme 2: Knowing What Is Already Being Measured*

- “Who already has data and what do they have?”
- What has already been said/done with regard to measurement in our areas of interest?”
- “Are there exclusive or ownership issues with respect to certain services or service measures? (For example, subgroups of libraries targeted for specific groups and how to integrate these measures at a broader level.)
- “Who is generating data? Where are the sources of research?” (Note that this is a different issue than who already has data.) Is there one place this research is being gathered?
- “Are there best practices that can be broadcast?”
- “Are there indices of performance that can be used more broadly?” (For example, an equity index.) If not, can we develop some?”
- “Are there partnerships that could be formed to accelerate the measurement development process?” (For example, educational institutions or other related agencies including other not-for-profits.)
- “What gaps exist in current data, and are these gaps important to fill?” (For example, seniors or other special interest groups.)
- “At what level(s) are the data collected, and how often are they collected?”
- “How much will data collection cost?”

### ***Theme 3: Focusing Measurement at the Local Level***

Many of the discussions pointed out the urgent need for detailed data at the local level.

- “What are the number and types of services for particular groups at the local level?”
- “How can we measure complex issues such as the integration of technology and services at the grassroots level?”
- “How can we look at service issues from the public’s perspective? What do they need?” (Note that “they” could include funders, trustees, decision makers, and other stakeholders as well as service users.)
- “How do we measure impact at the user level?” (For example, look at businesses using libraries, NOT libraries serving businesses.)

## SECTION IV: FINDINGS AND RECOMMENDATIONS FROM DISCUSSION GROUP SESSIONS

The Discussion Group Chairs and/or Recorders presented findings and recommendations resulting from the discussion group sessions:

### Group I: Library Services to Educationally and/or Economically Disadvantaged (including literacy programs)

Jim Scheppke, Chair

Christie Koontz, Recorder

#### Detailed Findings and Recommendations

What are the needs of the disadvantaged from the library?

What are the gaps?

What are the solutions?

1. Local policies that promote or enable public library services.
2. What percentage of this disadvantaged population is receiving library service? What services are they using, and for what? Which are most effective?
3. If the disadvantaged do not come into the library, how can we be the gateway?
4. The disadvantaged need to not perceive the library as too formidable.
5. Need for the library to go to **where** they are—not ask them to come to us.
6. Read Building Communities From the Inside Out, Northwest Institute for Public Policy.
7. Package strategies for communities to offer library services to the disadvantaged including services, funding, distribution. Offer “weapons.” This could come from NCLIS or NCES with ALA.
8. Educate stakeholders in their own language about the need for library services to disadvantaged.
9. FSCS Data GAP—need **check off** for adult programming, e.g., literacy, senior citizens, job and career, small business information, etc.

In selecting areas for research. . .

10. Need to utilize strategies that align libraries with issues already on the table, such as, teen pregnancy, violence, immigration, even as simple as getting libraries mentioned in local marketing.
11. Track on a baseline level of what libraries offer.
12. ‘Best practices’ of businesses could be adapted to libraries, e.g., publicize five libraries doing literacy programs best, ALA initiatives, or demonstration programs. Emulate or network on ‘best’ programs or services, however possible.
13. Partnerships on gathering and disseminating local, state, and federal studies including standards, volume definitions, etc.

## **SUMMARY**

### **What does equity really mean?**

- Concern must initially be with equitable access to library services and materials that are already in place. Equitable access to non-electronic?
- Access based upon amount of funding dollars available and other factors.
- Operationalize—equitable access—research.
- Equity in service-inputs is an indicator of “access” but not the only one.
- Disadvantaged populations are ‘kept out’ by not having the level of service-inputs because of cultural barriers, experience, etc.
- Legal mandate for public library service.

**Group II: Library Services to Multicultural Populations (including limited English-Speaking)**

Karen Watkins, Chair

T. K. Cassidy, Recorder

**Recommendation**

1. Librarians can use technology to share workable multicultural programs—not national statistics operations.
  - Composition of collection with regard to language/cultural tradition
  - Do you have collections targeted at subpopulations? (Multicultural population)
  
- A. Prepare inventories of software useful and relevant to multicultural groups.
- B. Portion of total expenditure is used for support of multicultural programming?
- C. In reporting on library programs, include percentage of public service staff speaking languages of multicultural groups in the community.
- D. How many appropriate languages is your OPAC (etc.) in?
- E. Case study/methodology could be applied for studying service to multicultural population segments as alternative to traditional survey methods to determine if there are appropriate national issues?
- F. Percentage of staff development/training services to multicultural population?
- G. What percentage of staff (public service) is representative of multicultural population?

### **Group III: Library Services to Physically Handicapped**

Judith Dixon, Chair

Mary Jo Lynch, Recorder

#### **Special Recommendation**

The group on library service to the physically handicapped recommends that data be collected for all types of libraries in the following areas:

1. College and report data on availability of assistive devices, such as TDD for deaf persons, computer input devices for persons with motor impairments, and computer output devices for persons with visual impairments.
2. Accessible library materials such as recorded books, large print materials, descriptive/captioned video, CD-ROM's Internet access (for use in library/or loan), along with circulation statistics for each.
3. Targeted services such as document conversion, awareness training for staff and training of disabled persons in use of equipment and services.
4. Accessible information developed by libraries for the Internet, adherence to emerging standards.
5. Access to ongoing program activities and services, such as interpreter services for public programs, OPAC's for access from home, accessible newsletters.
6. Outreach, publicity, and promotion of targeted and ongoing services to disabled and at-large communities.
7. Work with other organizations in a partnership role to provide access to information and services.
8. ADA-compliant physical-access to building.

**Group IV: Library Services to Rural and Rural/Remote Populations**

Bernard Vavrek, Chair

Jan Ison, Recorder

Special Recommendation

Encourage the participation in data collection process by Native American, Insular areas, and Alaskan and Hawaiian Natives.

## **Group V: Library Services to Seniors**

Hugh O'Connor, Chair

Jan Feye-Stukas, Recorder

Data gaps needed to be filled by questions to libraries and questions to users.

### **Questions to Libraries**

1. Does the library have special services targeted for seniors, e.g., identifiable staff, special budget (line item)?
2. Does the library collaborate with agencies that deal with aging?
3. To what extent are your services used by seniors?
4. Does the library have:
  - a. these assistive devices —

large screens	access to Internet
special mouses	on-line catalog
voice output	etc., etc.
  - b. alternative formats —

voice output large print	multimedia kits
book on tape	etc., etc.
5. Does the library provide services to sites that serve or house the elderly?  
Including technology applications?
6. Does the library include seniors in planning/reviewing library services?
7. Is information technology integrated into various library programs/services?
8. Does the library have a senior volunteer program?
9. Does your library provide guided access to use of technology/Internet/web?  
an active formal program?  
navigational guides?  
personalized instruction?  
group instruction in and out of the library?
10. Do you attempt to assess the qualitative value of library services to your users?  
How do you implement the findings?

### **Users Perceptions—Discussion Group/Survey Questions**

1. To what extent do you use library services print-reference technology programs?
2. What is value?
3. How does it affect quality of life?



**Group VI: Services to Businesses and Employers**

Sam Memberg, Chair

Joseph Shubert, Recorder

**Recommendations**

1. NCES should conduct a “fast response survey” of public library services to business.
2. For “costs,” “values,” and “marketing,” NCES should support research to identify studies, summaries, findings, and draw conclusions on the national significance of the findings.
3. NCES should design and create electronic reporting mechanisms for fuller data gathering.
4. Extend these surveys to the broader areas of non-profit, government, education, and other employers.

**NCES/NCLIS**  
**FORUM ON LIBRARY AND**  
**INFORMATION SERVICES POLICY**

*Topic: Impact of Information Technology and Special  
Programming on Library Services to Special Populations*

**RAMADA PLAZA HOTEL OLD TOWN**  
**Alexandria, Virginia**

**PROGRAM OUTLINE**  
**May 20 - 21, 1996**

**Monday, May 20, 1996**

Time	Function	Speaker(s)
8:30 - 9:00 a.m.	Opening Session	Lee Ballroom
	Welcome and Introduction of Emerson Elliott, Forum Chair	Jeanne Griffith, NCES Acting Commissioner
	Introduction of Speakers	Emerson J. Elliott, Forum Chair

Time	Function	Speaker(s)
9:00 - 10:30 a.m.	Speakers	<p>Betty Turock, President, American Library Association, "<i>Information Technology and Equity of Access</i>"</p> <p>Peter Young, NCLIS Executive Director, "<i>Information Technology and Measuring Change in Library and Information Service</i>"</p> <p>Shelley Quezada, Consultant, Library Services to the Unserved, Massachusetts Board of Library Commissioners, "<i>Programming for Special Populations and Measuring Results</i>"</p>
10:30 - 10:45 a.m.	Break	
10:45 - 11:15 a.m.	<p>Introduction of Discussion Group Chairs and Recorders</p> <p>Summary of Objectives for Discussion Groups</p> <p>Panel on Progress in Measuring Library Services Outputs and Plans for Measuring Value of Library Services</p>	<p>David Penniman, School of Information Sciences, University of Tennessee, Knoxville, and Chair, Panel on Measuring Value of Library Services</p>
11:15-12:15 p.m.	Group Discussion Session I	<p><i>Group I:</i> Library Services to Educationally and/or Economically Disadvantaged (including literacy programs)</p> <p><i>Group II:</i> Library Services to Multicultural Populations (including limited English-speaking)</p>
		<p>Jim Scheppke, Chair Christie Koontz, Recorder</p> <p>Gary Strong, Chair Karen Watkins, Recorder</p>

Time	Function	Speaker(s)
	<i>Group III: Library Services to Physically Handicapped</i>	Judith Dixon, Chair Mary Jo Lynch, Recorder
	<i>Group IV: Library Services to Rural and Rural/Remote Populations</i>	Bernard Vavrek, Chair Jan Ison, Recorder
	<i>Group V: Library Services to Seniors</i>	Hugh O'Connor, Chair Jan Feye-Stukas, Recorder
	<i>Group VI: Library Services to Businesses and Employers</i>	Sam Memberg, Chair Joseph Shubert, Recorder
12:30 - 2:00 p.m.	Lunch	
	Introduction of Luncheon Speaker	Paul Planchon, NCES Associate Commissioner
	Speaker	Lygeia Ricciardi, Policy Advisor, Office of Plans and Policy, Federal Communications Commission, <i>"Planning for Universal Service for Libraries under 1996 Telecommunications Act"</i>
2:15 - 3:45 p.m.	Group Discussion Session II	[Same as above]
3:45 - 4:00 p.m.	Break	
4:00 - 5:30 p.m.	Group Discussion Session III	[Same as above]

**Tuesday, May 21, 1996**

Time	Function	Speaker(s)
8:00 - 8:30 a.m.	Coffee	
8:30 - 10:30 a.m.	Panel, Measuring Value of Library Services	David Penniman, Panel Chair Panelists: John Bertot, University of Maryland - Baltimore , Department of Information Systems; Glen Holt, Executive Director St. Louis Public Library; Paul Kantor, Rutgers, School of Communication, Information & Library Studies; Don King, University of Tennessee, Knoxville, School of Information Sciences; Bruce Kingma, Assistant Professor Department of Economics, State University of New York, Albany
	Forum Discussion	
10:30 - 10:45 a.m.	Break	
10:45 - 11:45 a.m.	Reports from Discussion Groups	Emerson Elliott, Forum Chair
11:45 - 12:30 p.m.	Forum Evaluation and Recommendations for NCES/NCLIS and Future Forums	Emerson Elliott, Forum Chair

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May 20-21, 1996

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