


Spring 1990

Special Libraries, Spring 1990

Special Libraries Association

Follow this and additional works at: http://scholarworks.sjsu.edu/sla_sl_1990

 Part of the [Cataloging and Metadata Commons](#), [Collection Development and Management Commons](#), [Information Literacy Commons](#), and the [Scholarly Communication Commons](#)

Recommended Citation

Special Libraries Association, "Special Libraries, Spring 1990" (1990). *Special Libraries, 1990*. Book 2.
http://scholarworks.sjsu.edu/sla_sl_1990/2

This Book is brought to you for free and open access by the Special Libraries, 1990s at SJSU ScholarWorks. It has been accepted for inclusion in Special Libraries, 1990 by an authorized administrator of SJSU ScholarWorks. For more information, please contact scholarworks@sjsu.edu.



LIBRARY

**MENTORING
CAREER PLANNING**

INTERACTIVE LEADERSHIP

EMPOWERMENT

**A special issue guest edited by
the Library Management Division**

Also in this issue:

Strategies for Success

**Favorite Reading of
SLA Leaders**

**Book and Software
Reviews**

special libraries

Spring 1990, vol. 81, no. 2

SPLBAN 81 (2) 90-174 (1990)
ISSN 0038-6723

The Most Intelligent Way To Spend The Next 10 Minutes.



SEARCH REQUEST

You've just been given a list of 20 companies to search in the next few minutes. Some are public but most are privately held. What's the best use of your time starting right now?

Spend it with Company Intelligence,[™] the dynamic new database from Information Access Company. In about 10 minutes your search will be over.

Company Intelligence is not only fast, it's easy — because the latest company information and the latest company news are linked together in a single

record. Company information is updated throughout the year to reflect changes in the news. News is updated daily from more than 3,000 newspapers, magazines and journals.

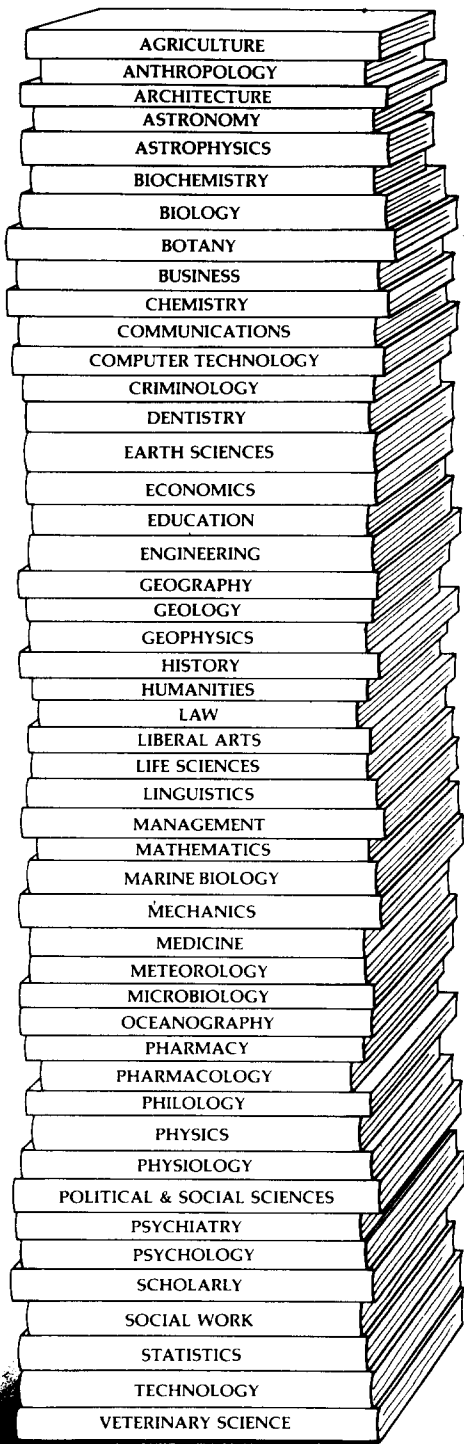
And you can locate and retrieve full-text quickly.

With over 100,000 private and public companies in the database, and more added daily, not even those hard-to-find privately held and emerging companies are likely to escape our attention. Or yours.

In-depth information about companies, hot stories about brand new companies, and more news everyday — all in one place. A most intelligent use of your time, starting right now.

Log onto *DIALOG*[®] file 479 for *Company Intelligence*. Or call us today for more information at 1-800-441-1165.

**COMPANY
INTELLIGENCE**[™]



The odds are stacked in your favor that we have the back volumes you need.

We maintain a comprehensive inventory in our warehouse that spans many years of back volumes as well as up-to-date issues.

Our customer service staff is anxious to answer your telephone or written requests. And now you can even access us through the FAXON-LINX network under "Jaeger". For a copy of our current catalog and brochure please write or fill-out and mail the coupon. Or call Toll Free 1-800-969-JAGR.



**ALFRED
JAEGER
INC.**

66 Austin Boulevard, Commack, NY 11725
 Phone (Code 516) 543-1500 • TELEX: 968-189
 FAX: 516-543-1537



**1-800-
969-JAGR**

ALFRED JAEGER INC.
 66 Austin Boulevard, Commack, NY 11725
 Gentlemen: Dept. SLA
 Please send your latest catalog and brochure.

NAME _____
 TITLE _____
 COMPANY/FACILITY _____
 ADDRESS _____
 CITY/STATE/ZIP _____
 PHONE # _____

TRANSLATIONS

CALL TOLL-FREE: (800) 223-7753

FAX: (415) 325-8428 & 325-7409

☆ Your organization's technical/promotional/legal and other general and specialized documentation and literature [articles, books, reports, proposals, specs, ads, brochures, scripts, catalogs, manuals, patents, contracts et al.] *expertly and expeditiously translated* ◆ **INTO ENGLISH** from any other major language ◆ **FROM ENGLISH** into any other major language ◆ **ALL MAJOR INDUSTRIAL FIELDS** ⇨ basic sciences/engineering/manufacturing ⇨ electronics/computers/instrumentation ⇨ pharmaceuticals/biomed/biotech ⇨ power plants/aerospace/military ⇨ banking/finance/insurance ◆ **BY VETERAN SUBJECT-QUALIFIED PRO'S** working into their respective native languages ◆ Word-processing/typesetting/desktop publishing in the major languages ◆ **PROMPT SERVICE WORLDWIDE** from state-of-the-art industrial translation center **IN CALIFORNIA'S SILICON VALLEY UNIPLEX:** international hub of leading-edge industries, higher education and advanced research — **HIGH-TECHNOLOGY WORLD CAPITAL** (just seconds from anywhere!) ☆

Call, fax,
telex or
write:

AD-EX[®]
WORLDWIDE

Translators
for Industry
since 1957

525 Middlefield Road — Suite 150, Menlo Park, CA 94025, USA

Telephone: (415) 854-6732 or toll-free (800) 223-7753

24-hour FAX: (415) 325-8428 and (415) 325-7409

Telex: 17-1425 AD EX USA MNP

WE SERVE THE WORLD'S INDUSTRY

© 1989 AD-EX[®], Menlo Park, CA.

special libraries

spring 1990

vol. 81, no. 2

SPLBAN 81 (2) 90-174

ISSN 0038—6723

Empowering the Special Librarian <i>Susan S. DiMattia</i>	90
The Special Librarian as a Front Runner: Running Fast, Running Hard, Running Ahead <i>Muriel Regan</i>	92
The President's Task Force on the Value of the Information Professional Update	97
Highlights	98
Conclusion: Closing the Service Gap <i>N. Bernard "Buzzy" Basch</i>	99
Valuing Corporate Libraries: A Senior Management Survey <i>Jim Matarazzo and Larry Prusak</i>	102
Strategies for Success (or Opportunities Galore) <i>Betty Eddison</i>	111
Power to the Information Professionals <i>Nancy Prothro Norton</i>	119
Leadership Can Be Learned <i>Susan S. DiMattia</i>	126
Personal/Career Strategic Plan or Making Things Happen through Self-Leadership <i>Susan S. DiMattia</i>	132
Favorite Readings of Some SLA Leaders <i>Susan S. DiMattia</i>	136

On the Scene

Joint Conference in New Zealand: An Experience to Treasure <i>Sara Anne Hook-Shelton</i>	138
How to Attract Ethnic Minorities to the Profession <i>Em Claire Knowles</i>	141
A Technological Assessment of the SLA Membership: Summary Report <i>Tobi A. Brimsek</i>	146
Pittsburgh: An Unparalleled City	155
Information Policies: Strategies for the Future <i>Sandy Morton and Maria Barry</i>	158
Book and Software Reviews	163
Index to Advertisers	31A

Cover design by: Paddy McLaughlin

Guest Editor: Susan S. DiMattia

Editor: Maria C. Barry

Publisher: David R. Bender

Secretary, Publishing Services: Paul J. Witzkoske

special libraries (ISSN 0038-6723) is published by Special Libraries Association, 1700 Eighteenth St. NW, Washington, D.C. 20009 202/234-4700. Quarterly: Winter, Spring, Summer, Fall. Annual index in Fall Issue.

© 1990 by Special Libraries Association. Material protected by this copyright may be photocopied, with credit, for the noncommercial purpose of scholarship or research.

Second class postage paid at Washington, D.C., and at additional offices. POSTMASTER: Send address changes to *Special Libraries*, Special Libraries Association, 1700 Eighteenth St. NW, Washington, D.C. 20009.

1990 State-of-the-Art Institute

“Intelligent Systems: A Framework for the Future”

SLA's fifth annual State-of-the-Art Institute will explore this complex and rapidly developing field and its impact on the information profession.

**October 22-24, 1990
in Washington, DC**

Topics will include:

- Knowledge management
- Decision systems
- Cognitive robotics
- Strategic implications of AI
- Natural language processing and more...

Sponsored in part by Disclosure, Inc.

For additional information, contact:



Special Libraries Association
1700 Eighteenth Street, NW
Washington, DC 20009
(202)234-4700

Subscription Rates: Nonmembers, USA \$48.00 per calendar year includes the quarterly journal, *Special Libraries*, and the monthly newsletter, *SpecialList*; add \$10.00 postage for other countries including Canada. *Special Libraries* is \$12.00 to members, *SpecialList* is \$3.00 to members, included in member dues. Single copies of *Special Libraries* (1981-) \$9.00; single copies of *SpecialList* (July 1980-) \$3.00. Membership Directory (not a part of a subscription) is \$25.00.

Back Issues & Hard Cover Reprints (1910-1965): Inquire Kraus Reprint Corp., 16 East 46th St., New York, NY. Hardcopy, Microfilm & Microfiche Editions (1910 to date): Inquire University Microfilms, Ann Arbor, MI. Microforms of the current year are available only to current subscribers to the original.

Changes of Address: Allow six weeks for all changes to become effective. All communications should include both old and new addresses (with ZIP Codes) and should be accompanied by a mailing label from a recent issue.

Refund Policy: Due to the cost of processing a reimbursement, the Association's policy is that "No refunds will be issued for amounts under \$5.00."

Members should send their communications to the SLA Membership Department, 1700 Eighteenth Street, NW, Washington, DC 20009.

Nonmember Subscribers should send their communications to the SLA Circulation Department, 1700 Eighteenth St. NW, Washington, DC 20009.

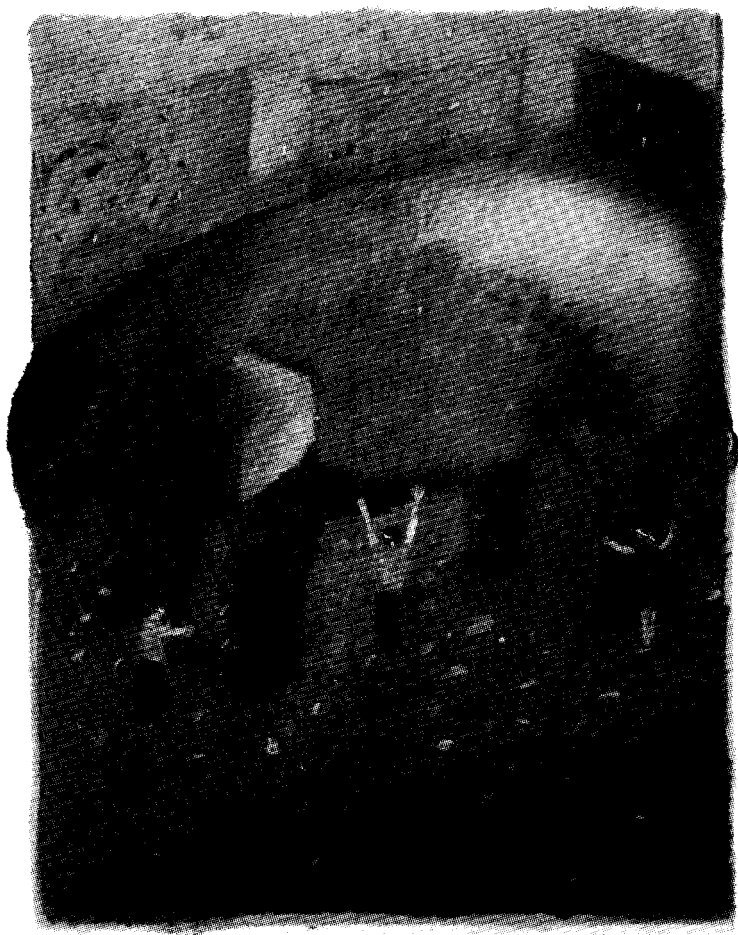
Claims for missing issues will not be allowed if received more than six months from date of issue. No claims are allowed because of failure to notify the Membership Department or the Circulation Department (see above) of a change of address, or because copy is "missing from files."

Special Libraries Association assumes no responsibility for the statements and opinions advanced by the contributors to the Association's publications. Instructions for Contributors appears in *Special Libraries* 79 (no. 1): (Winter 88). A publication catalog is available from the Association's Washington, D.C., office. Editorial views do not necessarily represent the official position of Special Libraries Association. Acceptance of an advertisement does not imply endorsement of the product by Special Libraries Association.

Indexed in: *Book Review Index, Computer Contents, Cumulative Index to Nursing and Allied Health Literature, Historical Abstracts, Hospital Literature Index, International Bibliography of Book Reviews, International Bibliography of Periodical Literature, Library Literature, Management Index, and Science Citation Index.*

Abstracted in: *Cambridge Scientific Abstracts, Information Science Abstracts, INSPEC, Library & Information Science Abstracts, and Public Affairs Information Service.*

MEMBERSHIP DUES: Member or Associate Member \$75.00; Student Member \$15.00; Retired Member \$15.00; Sustaining Member \$300; Sponsor \$500; Patron \$1,000.



When you focus on one part, it's hard to see the big picture

When you're an industry leader, everyone feels they know you.

Take OCLC, for example.

You probably got to know us through our dependable cataloging services and the Online Union Catalog, the world's largest bibliographic database.

There's more to OCLC.

Now new OCLC products make every

department in your library even more responsive to your users.

Get to know today's OCLC.

We'll show you another Big Picture: your library's potential, made possible today.

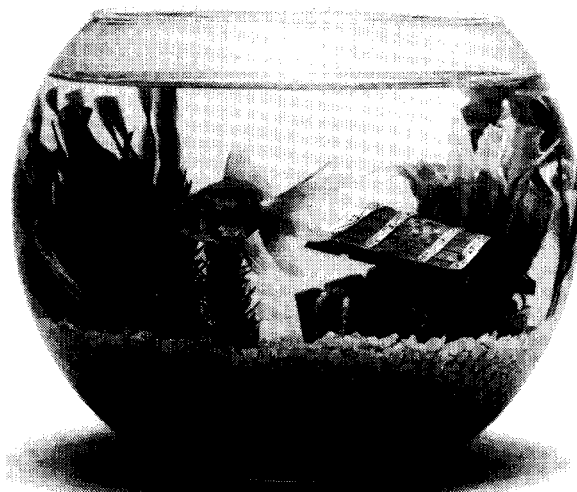


OCLC. WE WORK WHERE YOU WORK

800-848-5878 (U.S.) • 800-848-8286 (Ohio) • 800-533-8201 (Canada)



The small customer.



The small customer
at Ballen.

With some booksellers, a small customer doesn't rate quite the consideration that a large customer might. But at Ballen, the single book customer receives the same service and services that a thousand book customer does.

Which means no matter what size your library, you can expect to have your very own customer service representative to help answer all your questions. And your very own shelf reserved in our warehouse to guard against shipment and inventory mix-ups.

It also means access to our online, interactive BallenNet system for order entry and current status. The ability to reach a Ballen company officer just by picking up the phone. And an ongoing evaluation of library needs so rigorous, it's given us the industry's lowest overall return rate – less than 1%.

All of which we provide with the understanding that what are small fish today, might one day be big ones.

BALLEN

BOOKSELLERS INTERNATIONAL, INC

125 Ricefield Lane, Hauppauge, New York 11788

BIOSIS Previews[®]



ONLINE AND OFF

Getting the right information is important. Getting *all* the right information is imperative when your research entails vital life science decisions. Otherwise, you're just wasting time and money.

When you're searching online for information on scientific and biomedical research, you'll get it right the first time through one source—**BIOSIS Previews**, covering citations from approximately 9,000 life science serials from more than 100 countries.

**COMPREHENSIVE.
ON TARGET. RELIABLE.
BIOSIS PREVIEWS.**

Can you afford to depend on anything less?

For more information on **BIOSIS Previews** and a complete listing of online and offline vendors who offer this invaluable database, return the coupon or call 1-800-523-4806 (USA except PA) or (215) 587-4800 (worldwide). Do it now.

YES, send me information on **BIOSIS Previews**.

Name _____

Title _____

Organization _____

Address _____

City _____

State _____

Postal Code _____

Country _____

Return this coupon to: BIOSIS, Marketing
Section, 2100 Arch Street, Philadelphia, PA
19103-1399 USA; Telex 831739; Fax (215)
587-2016.

SL490TT



BIOSIS[®]

Information for Today's Decisions and Discoveries

BIOSIS Previews is a registered trademark of BIOSIS.
BIOSIS is a registered trademark of Biological Abstracts, Inc.

To Stay Ahead in Science and Technology...

You Need Bowker's A&I Journals.

Comprehensive, Worldwide Coverage of Today's Crucial SciTech Issues!

In today's world, up-to-date and accurate information on science and technology is vital. Each week, hundreds of science and technology periodicals publish thousands of important articles that can make a significant difference in your work.

Where can you turn for help in finding that information? Bowker's A&I Journals! Offering easy access to current developments in robotics, artificial intelligence, and CAD/CAM, as well as coverage of a multitude of topics related to the environment, energy, and acid rain, Bowker's A&I Journals provide incisive abstracts drawn from the scientific and technical literature published world-wide. These abstract journals will make research faster and easier and help you do your job better.

Reference Resources for Everyone

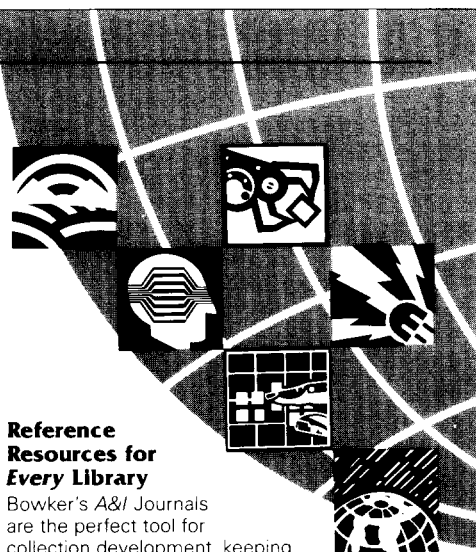
Whether your patrons are scientists engaged in research, business people who depend on closely monitored news, public officials involved in policy formulation, or members of the public looking for the hard facts, Bowker's A&I monthly* Journals provide information on everything from renewable resources to robotic locomotion to waste management, as well as thousands of other topics.

Convenient and Easy-to-Use

Compiled by specialists in their fields, each Journal's abstracts provide an accurate, comprehensive 100-word summary of each entry, plus all the bibliographic information needed for further research. With its vast array of current literature, the A&I Journals free you from time-consuming information searches by allowing patrons to work independently with research sources screened and compiled in one place.

In-Depth Coverage

Indexing over 1,800 scientific, technical, academic, and related journals published in over 50 countries, Bowker's A&I Journals also provide access to a wide range of conference proceedings, government studies, patent publications, and other significant, hard-to-find materials.



Reference Resources for Every Library

Bowker's A&I Journals are the perfect tool for collection development, keeping you alerted to the latest scientific trends. And, since you can order full-text microfiche of over 80% of our cited articles, you can offer your patrons access to information *beyond* your current periodical holdings.

Bowker A&I Journals

- ▶ Environment Abstracts
- ▶ Acid Rain Abstracts
- ▶ CAD/CAM Abstracts
- ▶ Robotics Abstracts
- ▶ Energy Information Abstracts
- ▶ Artificial Intelligence Abstracts

Bowker's A&I Journals are also available online or in annual cumulative volumes.

Call Now for a Free Sample Journal!

To order, or for more information about our integrated services of monthly journals, annual indexes, microfiche, and online databases,

CALL TOLL-FREE 1-800-521-8110

(In NY, AK, or HI call collect 1-212-463-6869).

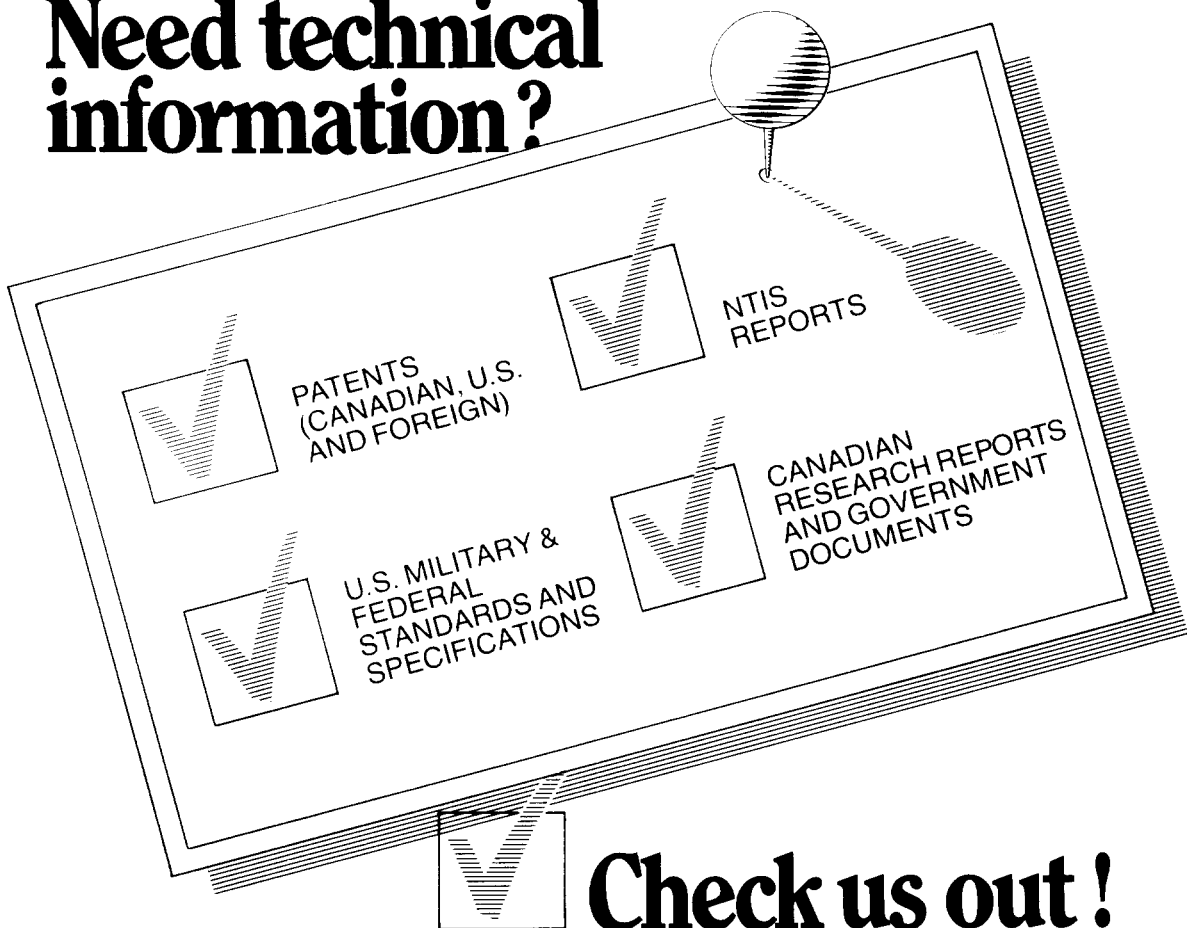
*bi-monthly for *Acid Rain*.

BOWKER  PUBLISHING

THE ABSTRACTING AND INDEXING DIVISION OF H. R. BOWKER

245 West 17th Street, New York, NY 10011

Need technical information?



Check us out!

For 15 years, the Technical Information Centre, a division of Micromedia Limited, has supplied customers all over the world with copies of Canadian and foreign patents and trademarks, U.S. military standards and specifications, NTIS reports, and Canadian technical and government documents.

We offer:

- excellent quality document copies

- competitive prices
- easy ordering by fax, electronic mail, phone or telex
- shipment within 24 hours by fax, mail or courier
- easy payment, including VISA, Mastercard and Deposit Account.

Isn't it time you checked us out? Write, fax or phone for a free copy of our Technical Information Centre catalogue of products and services.



MICROMEDIA LIMITED

Canada's Information People

The Technical Information Centre

165 Hôtel de Ville, Hull, Québec J8X 3X2 (819) 770-9928

Fax (819) 770-9265 Toll free (800) 567-1914

We have our reasons why DIALOG[®] should be your primary research tool.

As an information specialist, you're no stranger to DIALOG.

There's even a good chance you're using it every day. After all, DIALOG is the world's largest storehouse of electronic information.

But that's only one of the many reasons why it should be your primary research tool.

You see, we listened to your requests for more information. More accessibility. And more support.

And then we responded.

When you told us you needed more full text choices, we gave you more full text articles from more publications than any other online service.

When you requested more current news, we replied with more continually updated news sources. When you asked for a better way to track advances in technology and patents worldwide, we added more international databases.

When you required more data on business and industries outside the United States, we opened up a world of new opportunities with detailed information on more than a million companies operating abroad.

And when you searched for a way to gain an edge over the competition, our new business sources enabled you to collect competitive intelligence and track merger and acquisition activity on virtually every industry.

We even developed a better way to promote your own organization's research center. Our support literature — concise overviews on our growing online sources — help spread the word about online information to people who need it most.

If you'd like to receive these complimentary materials, or additional information about DIALOG, call toll-free 800-3-DIALOG.

Once you do, you'll discover your own reasons why DIALOG should be your most valuable information solution.

DIALOG INFORMATION SERVICES, INC.
A Knight-Ridder Company 

The world's largest online knowledgebank.

And you have yours.



"My reason for using DIALOG? It's a single source solution for all of our information needs. No other online service offers more."

—Donna Stevens
Business Information Specialist
Raychem Corporation

What should be patently obvious . . . isn't always



Let CAS ONLINE[®] help you with your patent searches

Search for patents and related literature at your personal computer! Through the CAS ONLINE files (brought to you on STN International[®]), you can obtain worldwide, up-to-date patent information quickly and easily.

The CAS ONLINE files, including CA, REGISTRY and CAPreviews, provide:

- Substance information and patent literature from 27 national and 2 worldwide patent offices (the European Patent Office and the World Intellectual Property Organization)
- Relevant non-patent literature cited in CHEMICAL ABSTRACTS

- Generic structure or name searching (no special coding to contend with)
- Easy crossover to other STN files, such as INPADOC, covering patent families and legal status information for patents in all areas of technology
- The best source of up-to-the-minute patent information, according to some of our customers, in CAPreviews

These and other special features make CAS ONLINE the patent database of choice. Send for more information about CAS ONLINE and STN International today!

Yes, I want to learn more about STN and CAS ONLINE for patent searching!

Name _____

Job Title _____

Organization _____

Address _____

Telephone _____

Mail to: Chemical Abstracts Service
Marketing Dept. 32890
P.O. Box 3012
Columbus, OH 43210 U.S.A.

STN International, the scientific and technical information network, contains 90 international databases. STN International is operated in Europe by FIZ Karlsruhe; in Japan, by JICST (the Japan Information Center of Science and Technology); and in North America, by Chemical Abstracts Service, a division of the American Chemical Society.

We Think That DataLib Is Quite Simply the Best at Doing for Librarians What Librarians Need to Do.

We Call It:

- Integrated
- Interactive
- Multi-User
- Multi-Site
- Multi-Task

*Omnicompetent, dedicated
library automation.*

Our Customers Call It:

- Indispensable
- User Amiable
- Thought Out
- Bullet Proof
- Career Insurance
- A Patron Pleaser
- A Team Player

*The system they'd design,
if they designed a system.*

DataLib automates corporate and government special libraries at speeds measured in blinks of the eye. Its sole purpose is to provide the finest library management tools to professional librarians and their patrons. We're sure you'll probably come up with your own terms of endearment, but first you'll have to call DataLib so we can start introducing our library manager to yours.

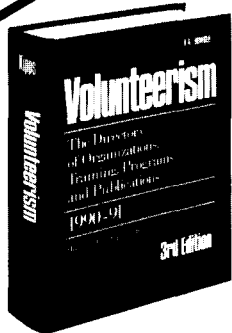
**Call us at 1-800-843-4850 Ext. 7416
or 1-703-758-7000 Ext. 7416**



11400 Commerce Park Drive ■ Reston, Virginia 22091

See us at Booth 171/172 at the SLA Conference

**SPECIAL
Pre-Publication
Offer!**



R.R. Bowker announces an all-new edition of the definitive guide to the who, what, where, and how of America's volunteer effort.

Volunteerism

**The Directory of Organizations,
Training, Programs and Publications 1990-91**

Third Edition

Harriet Clyde Kipps, Editor

Prefaces by Barbara Bush, Senator John Glenn, and Eugene M. Lang.

This unique, fully up-to-date directory to more than 5,500 of America's volunteer organizations guides you through the full range of national and local volunteer resources, programs, and training events.

Featuring new sections on volunteer efforts directed at combating AIDS, the problems of the homeless, and teenage pregnancy, plus an innovative chapter outlining the activities of the various state Governor's Offices on Volunteerism, this singular guide also features expanded coverage of literacy and anti-drug campaigns. **Volunteerism** encompasses the entire spectrum of the field's programs and organizations, including:

- drug and alcohol abuse
- education
- employment
- family
- the handicapped
- physical and mental health
- nutrition
- senior citizens
- and more.

Volunteerism gives you a clear and concise portrait of each organization; every description includes the latest information on the group's name, address, telephone number (including toll-free and Fax numbers where available), objectives, services, and publications.

Previously published as the *Community Resources Directory*, **Volunteerism** offers persons and groups at every level and of every interest a much-needed networking tool—a tool remarkable not only for its authoritative and rigorously checked content, but also for its breadth of coverage.

Volunteerism is available now at the Pre-Publication price of \$85.50—10% off the list price of \$95.00. **Place a Standing Order** and save an additional 5% plus 5% off the list price on future editions. For this edition you pay only \$80.75! This Pre-Publication price expires March 31, 1990.

Order your copy today by using this order form, or by calling **Toll-Free 1-800-521-8110** (in New York, Alaska, and Hawaii, call collect 212-337-6934; in Canada call Toll-Free 1-800-537-9416).

April 1990 0-8352-2739-1 \$95.00

About the Editor:

Harriet Clyde Kipps is one of America's leading authorities on Volunteerism. In 1984 she was awarded a White House Commendation in recognition of her exemplary volunteer service.

R.R. BOWKER
THE INFORMATION REFERENCE
COMPANY

Yes! Please rush me the definitive guide to America's volunteer organizations, programs, and publications. I've indicated my ordering choice below.

Qty. _____

_____ Standing Order/Pre-Publication price of \$80.75 each. I get 15% off the \$95.00 list price of this edition of **Volunteerism**, and 5% off the list price of all future editions.

_____ I prefer to take advantage of the 10% Pre-Publication price of \$85.50 each.

ORDER FORM

Volunteerism: The Directory of Organizations, Training, Programs and Publications 1990-91 (ISBN 0-8352-2739-1)

Name _____

Institution _____

Address _____

City/State/Zip _____

BILLING OPTIONS:

KL06

- Please bill us: P.O. # _____
 Payment enclosed
 Charge my: Visa MC Amex
 Card # _____ Exp. _____

Signature _____

Please mail to: R.R. Bowker Order Dept.
P.O. Box 762, New York, NY 10011

SHIPPING OPTIONS: Unless otherwise indicated, all orders are shipped Fourth Class Book Rate or Library Rate, as appropriate.

Prices applicable in the U.S., its territories, and in Canada. Shipping and handling will be added to each order at 5% net invoice amount. Rest of the world: R.R. Bowker (U.K.) Ltd., P.O. Box 98, Broomfield Green, Kent TN15 8PH, England. Telex: 95678. Fax: 0732 884079.

Introducing TECHLIBplus. The Ultimate Control For Library Management.

Today's special library is the hub of valuable information. As librarian, you must manage the library efficiently, assisting patrons and handling administrative tasks.

Such demands require an automation system that gives *total* control. Only one does that: TECHLIBplus.™

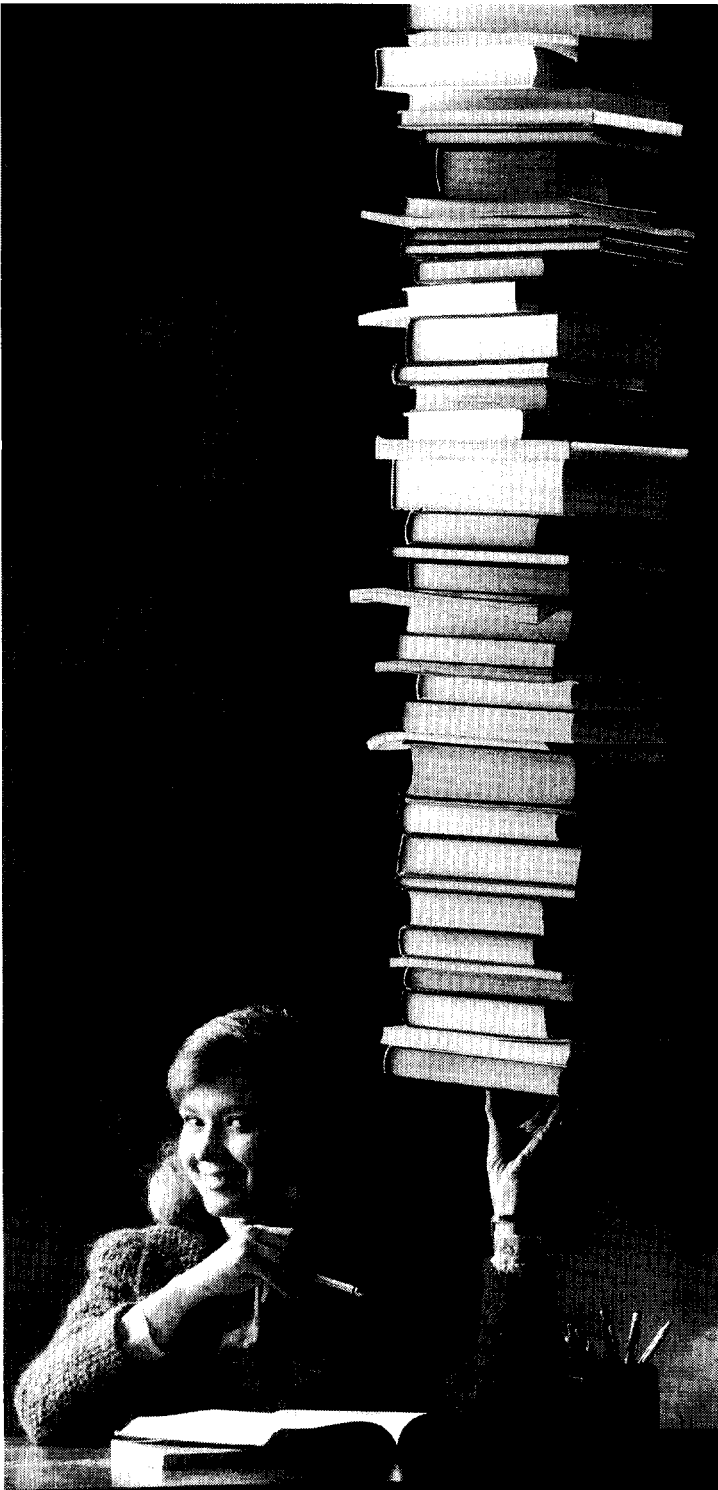
TECHLIBplus is a complete, integrated system for special, technical, and corporate libraries. It automates acquisitions, circulation, cataloging, online catalog, and serials control, simplifying them for librarians and patrons alike.

Powered by BASISplus,™ the world's leading text information management system, TECHLIBplus runs on mainframes and minicomputers.

To learn more about TECHLIBplus or register for a seminar near you, call Information Dimensions at 1-800-DATA-MGT.

 **Information
Dimensions**
a BATTELLE Subsidiary

TECHLIBplus and BASISplus are trademarks of Information Dimensions, Inc.



— From the Guest Editor —

Empowering the Special Librarian

Tom Peters once gave a rundown of the potential influence of *In Search of Excellence*:

- 5 million copies sold,
- 2 or 3 million people may have opened it,
- 400,000 to 500,000 read up to five chapters,
- 100,000 read it cover to cover,
- 25,000 took notes,
- The book spawned video and audio cassettes, seminars, and articles.

“But the question remains; who’s doing much of anything differently?”

That same sense of wonder confronted those of us planning this special issue of *Special Libraries*. Over 12,000 copies of the report of the President’s Task Force on the Value of the Information Professional have been distributed since it was issued in 1987. When questioned, we could find very few people who remembered reading the report, and fewer still who had changed the way they managed, or knew of anyone who made any alterations because of it.

As these thoughts circulated in my head, and I faced the task of establishing a theme and outline for content of the issue, I heard Jim Matarazzo give a presentation to the New York Chapter of SLA. His topic was the final report on a follow-up study to the Task Force findings, which he had conducted in coopera-

tion with Larry Prusak. The report not only suggested actions for information professionals to take in order to strengthen their position, but also contained some rather startling projections into the future, based on corporate management’s view of the value of the information professional.

After discussions with Betty Eddison, who had gotten the ball rolling on the concept for a Library Management Division special issue of *Special Libraries*, it was apparent that our theme should attract practical articles which would encourage readers to take action. Leadership seemed to be what was needed—that creative, innovative, proactive, visionary force through which we can motivate our peers and subordinates, but more importantly, ourselves, to make a difference for our profession, our image, and our personal career path. In short, we wanted to encourage everyone to **make something happen**.

Putting together an issue of a periodical is somewhat like planning a successful dinner party. You can try to achieve a balance and synergy as you select the participants, but you can never be certain until it is all over whether it will be a success. Considering the desired-for balance, we began with a relatively diverse group of authors and gave them few constraints or guidelines, the end result is a wonderful blend. Muriel Regan and Nancy Norton both talk about power, continuing education, and how to foster a sense of appreciation among our clients, for the unique expertise of

the information professional.

If Muriel thinks we're running fast now, Jim and Larry's study shows that we'll have to run harder just to keep up in the future. They make a strong case for some of the issues expressed in Betty Eddison's survey—know your organization's structure, language, players, goals, competitors; also know your bosses attitudes, strengths, and weaknesses.

Nancy's themes mirror Betty's, Jim's and Larry's, and Muriel's: power, authority, knowledge, career strategy, and lifelong learning.

In short, you have in your hands some tools to start you on your way to an improved image and set of skills and goals. As you will see in the final article, a review of current management literature with the needs of the informa-

tion professional in mind, you can find some motivation, valuable tips, and continuing education in everything you read.

We hope this issue of *Special Libraries* will be valuable to you. The key lies not in reading it, but in doing something with it. As Eliza Doolittle says in "My Fair Lady," "Words, words, words; I'm so sick of words,...don't talk at all, *show me!*"

We end, as we began, with Tom Peters. "Our hope is that ten years from now you will be going back and checking your underlinings to see if you're still really doing the right things you committed yourself to do." Hear, hear! But don't wait ten years. Before April 1991, all of us involved in this issue would like to know how you have used it and what difference it has made in your life, if any. Go for it! ■

Susan D. Kilmartin

The Special Librarian as a Front Runner: Running Fast, Running Hard, Running Ahead

by Muriel Regan, president, SLA

SLA members are the leaders in the library and information management profession, the best and the brightest. They work in a field that is changing rapidly and placing more, and new, demands on them each year. The sophisticated technology with which special librarians work requires experience and skill, and they are often in positions that necessitate the development and use of their decision-making abilities. Some manage libraries or information centers of considerable size and budget—centers which provide services crucial to the professional ambitions and financial success of their parent organizations.

In such an information-oriented society, an information professional should be well paid and respected. Yet often, special librarians are hardly known and are respected only by the comparatively few people who make direct use of their services. Some are dramatically underpaid and are often not participants in overall organizational planning. In short, at a time when it is becoming obvious that an organization's growth and success depend on the quality of information used by its planners and decision makers, special information professionals are not being adequately compensated financially or looked to for the expertise they have developed. Relative to other technical specialists, special librarians are often underpaid and underappreciated. It is imperative that the inequality be explored, and it is equally important to discuss how the imbalance can be changed.

While special librarians *are* the front runners, the best and the brightest in the information profession, they have been too busy giving service and have not developed their professional image or claim to being what they are—experts in an age of people bewildered by the quantities of information produced. Although it is often special librarians' efforts that have been essential in keeping an organization running and successful, they have been far too modest.

In fact, they have been more than modest. Because most information professionals do not see themselves as having power, they have behaved as though they are powerless. I believe the contrary—special librarians are powerful.

SLA, the professional association for special information professionals, has been asked to work on improving special librarians' image, and to make managers and the public more aware of the complexity and the "modernness," of what information specialists do. Special librarians *are* becoming visible—which is all to the good—but more needs to be done. Information professionals need to be *empowered*, and public recognition is only a part of the solution to the problem. Information professionals need to empower themselves, as individuals, and as a profession. Power can be given, taken, or assumed—and there is much special librarians can do to take it or assume it for themselves.

First, the value and significance of the work

of special librarians has to be considered. If you have not read SLA's "Report of the President's Task Force on the Value of the Information Professional," published in 1987 and recently reprinted in *From the Top* (SLA, 1989), do so. (Ed. note: the report is summarized in this issue of *Special Libraries* and is available through ERIC. Two passages from the report are quoted here:

"What is the most important and yet the least palpable ingredient in every successful business? Information. Every CEO understands that information is the invisible force behind effective decision-making."

"The increasing tendency toward information overload requires a greater reliance on the people who turn information into useful packages, that is, the information professionals. While technology is advancing in the activities that organize information, analysis, judgement and decision-making remain intensely human activities."

Read the report. It presents in some detail and with supporting evidence, what information professionals know but don't act on—that they are, and will increasingly be, players in the future. So what to do? This paper offers a number of specific suggestions.

First, let's understand the extent of the professional importance of a special librarian. In one sense, the most traditional sense, information is considered a service. Information is also, however, a commodity that is bought and sold, a "critical asset," a "competitive weapon," a "strategic opportunity." The person selecting and providing information plays a critical role in an organization. It is a role that information professionals play personally, in corporate, academic and public libraries. Empowerment is, in part, an awareness of and a willingness to acknowledge the importance of this role.

As professionals, special librarians are competent, dedicated, accurate, and responsible individuals who know how to do their jobs. But they often underestimate the value of their work or fail to make that value clear to others.

Like other professionals, special librarians function in an age of management productivity rather than worker productivity. Management productivity depends upon, and is sometimes defined in terms of, information—its accuracy, adequacy, reliability, and accessibility.²

Today's world is dominated by specialists. For information specialists, power resides not only in obtaining information, but also in knowing how and where to obtain it. The knowledge of how to obtain information shouldn't be sold short by regarding it as a service; special librarians need to follow the lead of other specialists and not minimize what they do.

Don't make your work look easy when it isn't. Do not imply that any bright person can do what you do when you have spent years developing skills and educated judgement. Information professionals need to protect what has been referred to as their "turf"³—both our image and our expertise—and drop the modesty.

Refrain from putting too much effort into educating users to be independent. The truth is, special information professionals can do a much better job than a user with rudimentary information skills. Special librarians are the people to whom others turn for assistance—the specialists. No other profession gives away, or even sells, its trade secrets as librarians do. Instead, other professionals, other specialists, sell—and market—themselves and their expertise.

It is vital to understand the roles information professionals play in their organizations. Where is the library or information center positioned on the organization chart? It should be in a position where the special librarian is visible and knows what is going on within the organization. A company's librarian should receive information about the organization's long and short-term goals. Special information professionals belong out of operations and into decision-making and strategic planning—out of office management or administration, and into the realm of ideas. Such positioning will allow information professionals to make full use of their expertise for them-

selves, their library, and their organization—to anticipate what will be needed and to plan to meet those needs—to be proactive rather than reactive.

Special librarians must get used to thinking strategically, in terms of organizational goals and their ability to help meet those goals. As a matter of routine, the roles they do play and *can* play must be publicized. A cost analysis of what the special librarian does should be conducted and the results distributed to the organization. Downplay the routine or clerical aspects of the information center and present and promote the special information professional's work in terms of its value for the whole organization, not just one department or individual.

The roles of the information professional can be expanded by encouraging others in their organizations to make use of the information professional's technology and showing them what they might achieve with it. The special librarian should articulate the value of sharing or decentralizing information resources. Consider making the library or information center a clearinghouse for information needed by other departments not presently using your services, and provide that information in a format that meets their needs.

Step out of the role of librarian and become an information manager. The change means taking responsibility for packaging as well as providing information, and making certain that information travels through the organization to wherever it is needed. The special librarian may need to advocate the organization invest in appropriate information systems, fill in information gaps with new sources, or provide competitive intelligence. The goal is an environment that is hospitable to positive, negative, or neutral information, where information is not considered a threat, but a needed and vital asset, and where information is not lost in channels or ignored because it threatens someone's preconceptions. If the right environment and attitude can be created because of the information professional's personal and professional power, she or he has proven herself or himself a player, one to be taken seriously.

In short, an organization's special librarian must work for the attainment of organizational goals—while promoting and publicizing their own expertise. Use the power earned as a specialist, and receive appropriate recognition, respect, and rewards.

Peter Block, in his book *The Empowered Manager*, states that before one can achieve empowerment, you need to create a vision of greatness for whatever you manage—your department, library or information center, or yourselves. Allow yourself to dream—to indulge in some grandiosity—to develop, and then pursue, a vision that is both strategic and lofty. Before elaborating on goals and objectives—those reality-based ways and means—first free yourself to “articulate a vision of greatness,” as Block puts it (p. 105), to capture your own imagination and engage your own spirit. Block is not afraid to use words like “greatness” and “spirit.” He thinks, and I agree, that we have great potential—that we need first to recognize it, then articulate it to ourselves, and then, in more concrete terms, to others.

That last element, communicating what professionals do and can do, is public relations and politics.

Everyone knows, theoretically, what power is; but they may not know how to achieve or manage it. And they may consciously avoid power in its most direct and operational mode—the use of politics.

Politics can be defined as gaining, utilizing, maintaining, and changing power relationships. Special librarians need to learn the language of politics as a profession and as individuals—to protect and expand their “turf,” in order to attain the recognition they deserve.

In order to expand the boundaries of their libraries and information centers so their role is recognized, special librarians have to identify the people in their organizations who do or can share the special librarian's vision, and turn them into allies. Give up the notion that some mysterious “they” stops you from doing what you know you can or should do—and do it! Relinquish the safety of allowing others, or even habit and inertia, to define your roles. Present yourself, even in the one-professional

library—as a manager utilizing your educated judgement.

Stay abreast of new technology, particularly since the special information profession is a field where obsolescence is said to set in after seven years with no new education. Don't box yourself into career dead-ends by neglecting management skills. Special librarians have to learn how to be managers so they understand human behavior as well as they understand information. They must think, individually and as a profession, in terms of giving away information—but not expertise. Special librarians want to provide a service—but not at their own expense. Special librarians want to be viewed as playing an important role in the life of their organization. The campaign to improve their image and increase their power is professional, personal, and ongoing; every special information professional needs to map out his or her own private campaign, in addition to the battle being fought by SLA.

Be aware that many organizations would benefit from having a CIO, chief information officer; be aware these positions should be filled by some of us, not by the head of the department that owned the organization's first computer. Correct the misconception that because other departments handle internal information while the library handles secondary information, the latter is less timely and less important. Instead, promote and publicize your expertise, its usefulness, and its critical importance to your organization's success.

On a more personal level, time and attention should be given to career planning. Insist that you have a career path in your organization—or work to expand your role, as I've suggested, and create one. If this is not possible, realize the limits of the organization and think about moving on.

Career planning includes what many professionals do anyway—keeping up with developments in the field, participating in seminars and conferences, maintaining networks in your own and related fields, joining profes-

sional organizations and being active in them, and being professionally visible. In many cases, professionals develop new skills as they move along a career path. Be conscious of what the new skills are and their worth.

On a larger scale, as professionals and members of a professional organization—SLA—special librarians want to continue efforts already begun: projecting a clear and attractive image, and educating the public, employers, and legislators about what special information professionals really do and the benefits of their efforts. It has been suggested, in special library professional literature, that special librarians might want to give up the image of “helper,”—an image that dates back to the librarian's historical connection with education—and shift to the image of “information team member” or “partner.”⁴

As individuals and as a profession, special librarians must refuse to accept low-paying jobs while also insisting they are paid salaries worthy of a professional wage. If special librarians don't insist on proper remuneration for themselves, no one else will. The backing of professional organizations for encouragement and support on this issue is essential.

Encourage the best and brightest of the nation's young people to enter special librarianship by showing them it is a dynamic and rewarding profession for those who can master its intricacies.

Remember that information professionals are important in an age of information and that empowerment can be achieved.

Special librarians are at an interesting, challenging, possibly even a critical point in the profession, emerging as leaders in a post-industrial culture. This age of information, fast becoming a global age of information, should be ours. Special librarians are in the forefront, running fast, running hard, running ahead. I want to see us learn how to empower ourselves and attain the status, financial rewards, and satisfaction of empowerment that we deserve. ■

References

- ¹ O'Riordan, P.D. "The Emerging Role of the Chief Executive Officer," *IMC Journal*. May-June 1987. p. 19.
- ² Meltzer, Morton F. *Information, the Ultimate Resource, How to Find, Use and Manage It*. New York: 1981. pp. 23-24.
- ³ White, Herbert S. "Respect for Librarians," *Library Journal*. February 1, 1986. p.58.
- ⁴ Meltzer. *op. cit.* p. 23.

Muriel Regan is 1989-90 president, SLA.

The President's Task Force on the Value of the Information Professional

An Update

The report of the President's Task Force on the Value of the Information Professional, published in June 1987 by SLA, was so popular that it is now out-of-print and can no longer be ordered from SLA headquarters. However, SLA has made it available through ERIC. The ERIC citation is:

President's Task Force on the Value of the Information Professional. Preliminary Study. Final Report. Matarazzo, James M. and others. Special Libraries Association, Washington, D.C. 10 June 1987. 53 p.; Report presented at the Annual Conference of the Special Libraries Association (78th, Anaheim, CA, June 10, 1987). Identifying Numbers: ED287486; IR052163.

Order the report from the ERIC Document Reproduction Service (EDRS) in paper for \$6 or in microfiche for \$0.85 (prices are for mail orders). Address is: EDRS, 3900 Wheeler Ave., Alexandria VA 22304. Telephone (800)227-3742 or (703)823-0500 (in VA). Or use DIALORDER or other E-Mail document services.

The complete report is also included as Appendix B in *From the Top: Profiles of U.S. and Canadian Corporate Libraries and Information Centers*, (Special Libraries Association, 1989. \$25).

Jim Matarazzo has received word that the Task Force report has been translated into Italian. Russian and German translations are in progress. When Frank Spaulding referred to the report in a speech to the International Federation of Library Associations (IFLA), several people approached him, and ultimately SLA, for permission to translate and publish it. The Italian version, translated by Gabriella Magini of the Istituto Per La Ricostruzione Industriale in Rome, will appear in the March 1990 issue of *Il Bibliotecario*, a quarterly review of library science.

Below are the highlights and concluding section of the report. We urge you to order and read the entire report.

President's Task Force on the Value of the Information Profession

Highlights of Findings

The information professional must be prepared to prove the value of his or her services to the corporation. The Task Force studied three possible approaches:

- Measuring time saved
- Determining actual monetary savings/gains
- Providing qualitative, anecdotal evidence of value

The Task Force uncovered clear and compelling evidence of the value of the information professional to business:

- Georgia Tech's online information system saves \$1.2 million in faculty time. King studies show how the use of information professionals results in time savings in government and industry.
- Texas Instruments' Houston Library is a widely-used corporate resource that frees up scientist and researcher time. Its return on investment is estimated to be 515 percent.
- Top corporate executives testify to the worth of the information professional. According to an AMOCO executive, information professionals help the company "make better decisions...and avoid costly mistakes."
- Real-life examples prove quantitative worth of the information professional—for example, an \$11 database search saves a company 200 hours of lab work.

Further research, building on the Task Force's foundation, is required to design and document systems for measuring value.

President's Task Force on the Value of the Information Professional

Conclusion: Closing the Service Gap

by *N. Bernard (Buzzy) Basch*

Today's corporate information center is operating in an extremely competitive environment. It is competing with a wide variety of other services and production centers for a share of corporate resources in the form of operating budgets, staff, and decision making power. These resources are generally allocated by corporate management according to the contribution a particular service center or production department makes toward maintaining or increasing the level of available resources.

It is relatively easy for a sales or production department to demonstrate its contribution to the corporate "bottom line" in terms of units produced or sold. Quantifying the contributions of a support service department, like the information center, is much more difficult.

The Special Libraries Association's Task Force on the Value of the Information Professional has made the job of "selling" the benefits of the information center to corporate management much less daunting. Each member of the Task Force has outlined specific techniques that have been used successfully by information professionals to quantify their services in terms of real-dollar cost savings, financial gains, or liability avoidance for the corporation. The Task Force has also provided strategies for gathering evidence of less tangible but equally valuable benefits such as time saved by other corporate units when they use the information center to locate data necessary for their work.

Gathering quantifiable evidence of the seemingly intangible benefits of an information center is only the first step toward competing effectively in the battle for corporate resources. The "customers," in this case corporate managers, must still be convinced that their needs and expectations are being met sufficiently by the proposed service to justify its cost. The task of selling the services of the information center to corporate management is not unlike the marketing challenge facing firms in such service industries as express mail, banking, accounting, law, restaurants, or telecommunications. These service firms *must* master the art of providing the type and quality of service their customers need and expect in order for the firm to survive and prosper. The experience of those service firms that have been successful in terms of profits, sales, and customer satisfaction provides a number of lessons from which information professionals can benefit.

Those successful firms have learned how to close the gap between customer expectations and service delivery. They understand who their customers are, both those who make the actual purchasing decisions as well as those who influence purchasing decisions. They find out what their customers expect and set performance standards and service strategies to meet those expectations. They monitor their advertising and communications to make sure that they don't raise customer expectations or promise services beyond the level at which

their firm can perform. And they constantly monitor whether customers are getting the type and quality of service they expect.

This formula has been followed with much success by such corporate giants as Federal Express, I Restaurants, and American Express, but it has equal validity in much smaller settings, including the corporate information center.

The corporate information manager needs to know and understand who the key decision-makers in the corporations are—the people who set management strategies and determine budget and staff allocations, as well as those who influence their decisions. What are their goals for the corporation? What kind of information do they need for themselves, as well as for those corporate divisions they manage, to achieve those goals? How do they get the information now? Are they satisfied with the format in which they receive the information? Do they receive it in sufficient time to use it effectively?

It is not necessary to launch expensive market studies to gather this information. User surveys, such as the study described by Helen Manning in her paper “The Corporate Librarian: Great Return on Investment” (One of the papers in the Task Force Report), can be used to help determine user expectations, as well as to quantify service benefits. It is also important to talk to customers and prospective customers. Arrange to interview corporate managers. Read internal communications such as corporate newsletter, annual reports, and memos to stockholders.

The information manager should be thoroughly familiar with the business of the corporation, as well as the industry within which it is operating. Who are its competitors? How do they get information about developments within the industry, and how do they use it?

Armed with a clear understanding of the needs and goals of the corporation, the information manager can define service standards and strategies that address those goals and meet the expectations of management. Ann Talcott’s paper (One of the papers in the Task Force Report), “A Case Study in Adding Intellectual Value,” describes an excellent ex-

ample of a corporate library that established customer needs and expectations through interviews and observation, and then designed an Executive Information Service to meet—or even exceed—those expectations. In interviews with key clients, the information professional established the “goal” or purpose the information was to serve, the format in which the client wanted the data, and the client’s deadline for having the information.

The overall service goals and strategies of the information center should be related to the broader goals of the corporation. They should be clearly stated in writing, and presented to management for revision or approval. Similarly, transactions with individual clients should also begin with a clear understanding of the client’s expectations and a realistic statement of the services the information center will provide.

In order to meet service goals and expectations, the information manager must enlist the support of every staff member within the information center. Each staff member, from clerical through professional levels, should be aware of the promises that have been made to management and should assume responsibility for the fulfillment of those promises. This requires both team effort as well as the recognition of the autonomy of individual team members in dealing with clients. Additional compensation or special recognition in the form of awards or privileges helps to ensure consistently high quality performance from all staff.

One of the greatest difficulties service firms encounter is the tendency to promise more than they can deliver in order to lure more customers to their product. Although such promises may succeed initially in increasing the client base, they also increase the level of customer dissatisfaction with both the product and the firm. It is important to “advertise” the services of the information center within the corporation, but managers should monitor all such communications—be they letters, newsletter articles, brochures or reports—to be sure that services are described realistically.

Building service credibility also requires constant two-way communication between

the information manager and the center's user. Complaints—and compliments—should be encouraged and followed up. Managers should spend as much time as possible answering calls, talking to clients, and listening to their requests and suggestions. By monitoring customers' satisfaction and revising or changing service strategies to increase the level of satisfaction, the information manager builds credibility and customer loyalty.

The Task Force has pointed out the dangers to the corporate information center inherent in the current orientation toward short-term profits. In an effort to enhance the position of their own division within the corporation, some users may attempt to take credit for work done by the information center. Documenting the services of the information center helps to

overcome this problem, as does establishing customer loyalty through service credibility. The most important step the information manager can take to address this concern, however, is to be sure that service goals and service delivering are furthering the goals and meeting the expectations of the corporation as expressed by management.

As information professionals, you are not just working for the survival and prosperity of the information center, you are working for the corporation. The consequences of your job can have a significant impact on the company's bottom line. By closing the gap between customer expectations and service delivery, you will contribute to the growth and prosperity of both. ■

Valuing Corporate Libraries: A Senior Management Survey

by James M. Matarazzo and Laurence Prusak

■ Corporate managers of 164 libraries and information centers were surveyed to assess the value placed by senior-level executives in their libraries. The aggregated results of interviews with the executives to whom libraries report, show us how corporate libraries are perceived by their managers and provide a glimpse of the trends and changes projected in the near future for these information centers.

Background and Methodology

The Special Libraries Association, in a report from its Task Force on the Value of the Information Professional, highlighted a need for additional research on how the corporate world values its libraries and information centers. Specifically, the Task Force recommended a further study of the value placed by upper-level executives on both the information professional and the corporate library/information center. This study was conducted in response to that recommendation.

The survey focused on two needs: to enhance the body of research on how work traditionally associated with special libraries is valued, and to identify emerging trends for special libraries. The questions posed to corporate officials were selected to shed new light on these subjects across a broad spectrum of the United States' business and industry. Hopefully, the findings will assist corporate librarians in formulating plans and strategies.

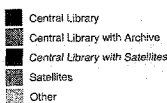
In conducting the survey, we followed an approach different from that commonly found

in today's self-referential professional literature. That is, rather than interview the librarians, we interviewed those individuals to whom the head of the library reports. These corporate officials represented various functions and have different titles. The most common functions reported were finance and administration, marketing, and information services. Titles ranged from manager to senior vice president. Only two of the interviewees had any library experience or library education, an interesting fact in itself.

The survey sample of 164 companies was developed by the authors from an analysis of contributions by the for-profit sector

to the gross national product (GNP). Selected firms, chosen by the size of the firm or by its importance to a specific industry, thus represented significant contributors to the major sectors of the U.S. gross national product. The process also gave us a sample representative of United States business while avoiding undue concentration on "information intensive" industries or, conversely, on struggling industries with libraries under obvious survival

How is the library service organized?



pressures. As noted in the appendix to the report, the interview list developed has a range and balance that reflect adequately the scope of businesses in the Unit-ed States.

The study focused on larger companies because they were judged as more likely to have fully functioning libraries and to have had these services for a reasonable

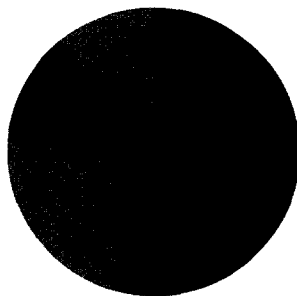
period of time. We selected this approach because we wanted thoughtful and seasoned commentary from those interviewed.

Our expectations were met. Because the executives interviewed must frequently justify the libraries to senior management or to a board of directors, many already had given some thought to our questions and were well prepared to answer them. Their responses focused on issues of library organization, staff sizes, values of services and staff, primary users, and ways to measure a library's value. Trends projected for future library roles also have been summarized.

Library Service Organization

The libraries in the 164 companies follow no common organizational scheme, although use of a central library, in some form, proved most typical. Of the libraries surveyed, 31 percent have a central library with satellites, 24 percent maintain a central library only, and 20

How many people (FTE) are providing library services?

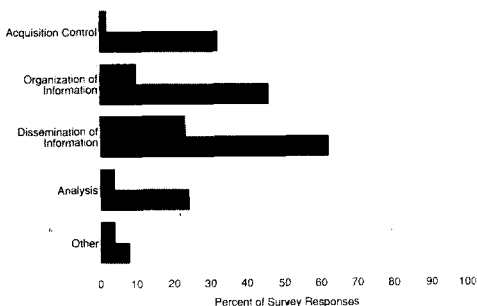


Size of Staff

Staff sizes at these spe-

cial libraries clearly tend to be small. The majority (55 percent) have staffs of five full-time equivalents or fewer. Another 21 percent of the libraries in our sample have staffs of five to ten full-time equivalents. Only 13 percent have staffs of 10 to 20 full-time equivalents, and only 11 percent have staff sizes greater than 20.

Reasons for Initial Establishment



Qualitative use of information and its subsequent identification and dissemination cause companies to establish information

centers. Those reasons outpaced others cited by the survey respondents for establishing libraries.

The responses reveal a contradiction between the value sought when a company initiates a library and the way that value is subsequently measured. For example, although no respondents cited cost control or employee productivity as reasons for establishment, libraries often are asked to justify themselves

using just such categories. Perhaps this contradiction can be explained by the difficulties inherent in measuring qualitative factors.

Fewer than 30 percent of the respondents mentioned data analysis as a reason for establishing the library, indicating a need for improving library capabilities in this area. Librarians are rarely perceived to be information

analysts. Skills for acquisition, organization, and dissemination of information do not bring with them industry knowledge

or the tools needed for analysis. Adding information-analysis ability to the skill base of the corporate librarian is a potential enhancement that should be studied. For example, how much knowledge of business information is considered equal to knowledge of the business itself?

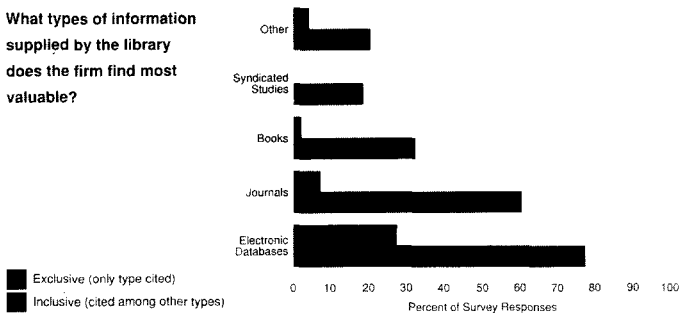
Value of Services?

Librarians usually spend considerable amounts of money, and management must

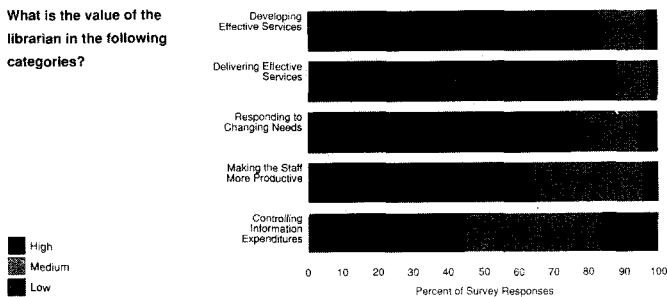
have a clear vision as to what the organization receives for that investment. Management does not ask, "How good is the library?" Instead, it asks, "How much good does the library do?"

Based on responses to the survey, librarians must do much more to demonstrate the value of the corporate information center. When asked to identify the library services that added the most value to the company, nearly

What types of information supplied by the library does the firm find most valuable?



What is the value of the librarian in the following categories?



two-thirds of the respondents did not know and chose not to respond. This lack of knowledge is especially serious because the interviewees not only exercise management control over libraries, but also are the principal evaluators of library managers and staffs. These same individuals also may be asked to justify library budgets and defend against any

move to curtail or reduce library expenditures. Given the survey response, some substantive efforts toward de-

monstrating the value of various library services would seem prudent. Perhaps library managers should conduct appropriate studies on value, then convey those results to senior management.

Our findings in this survey are buttressed by similar results in earlier work. In a 1983 study, MacDonald¹ found that neither librarians nor

corporate managers gave high marks to the library when asked if its information helped the firm make a profit. In

her study, corporate managers were neutral on the value, while librarians perceived a more positive value for the information provided. Coupled with the fact that more than 60 percent of the corporate managers in our SLA study elected not to respond to or did not know about specific value, the research indicates a need for librarians to demonstrate *in business terms* the value of services provided. Findings in a new work² provide a more positive sign:

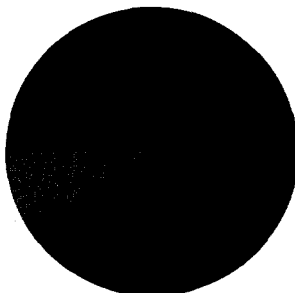
The most significant reason given for development of an outstanding corporate library was upper management's belief that information is important to the company.

Value of the Librarian

Librarians were generally rated highly by the survey respondents for developing effective services, and responding to changing needs. In addition, more than 40 percent

What library services add the most value to the corporation?

■ No Response
■ Dissemination of Information
■ Combination of Other Responses



of the executives in this study rated their libraries/information professionals highly in controlling information expenditures. Those who did not rate them as highly acknowledged that the librarians cannot control all of the costs involved.

Two factors should be noted in this response. One is the emphasis placed on developing and delivering effective services. Comments by the executives on this question noted that the library's "value-added" performance is enhanced by developing services, not by simply offering menu-type selections to users. Important services include the various customized programs designed for specific users or specific divisions within a company.

A second factor to note is the intuitive nature of these responses. In the absence of any formal evaluation or measurement, the corporate managers of libraries based their responses on impressionistic evidence. To the authors, this practice offers shaky footing in an economy and a business climate that shows little tolerance for any service failing to contribute directly to the business of the firm.

Most Valuable Services

Print materials still show good value, but obviously databases now provide a key value

to library users. Almost 80 percent of the survey respondents cited database searching as a key library service.

The increased importance of databases presents some potential problems for librarians because it leads to increased pressure from several directions for end-user-initiated searching. Vendors promote this approach for

commercial reasons; end-users, especially those with computer knowledge, often see no need for an intermediary to do the

searches. In some fast-paced environments, the use of a librarian can be seen as a hindrance—a gatekeeper who adds little value.

To validate the use of an intermediary for database searches, corporate librarians should stress the following:

- The increased proliferation of databases and the issue of choosing the right one for each task;
- The need to apply special skills in a search process, which is more than simply following specific procedures;
- The need for in-depth knowledge of database pricing to control costs.

High cost has discouraged end-user searches to some extent. In several companies where end-user searching is permitted, for example, management seeks to end the practice because of high costs. However, nearly 10 percent of the respondents want to initiate end-user searching where it does not currently exist.

Main User Groups

Primary users of corporate libraries and in-

formation centers are technical staffs. Marketing and sales personnel form the next largest user group, followed by operations/administration (which includes the use of tax and law libraries). Such results will surprise no one.

Among the user types listed in the "other" category by respondents were systems/MIS, investor relations, and a specified "CEO" library.

Criteria for Evaluating Libraries

While no one criterion achieved even a 40 percent plurality in the survey responses, the quality of information made available was the single most important component. More respondents cited "better information" as a criterion than mentioned other standards. In addition, many of the respondents' answers summarized as "other" concerned issues—accuracy, timeliness, and the like—related to quality.

Interestingly, a substantial proportion of respondents declared they had no procedure at all for measuring the "value" of the library. This issue should be studied further, especially since a library is somewhat of a "discretionary" business need and not an essential operation.

Libraries face an additional problem when assessing value because they have no formal measurements for evaluation. In most other operations, the labor/management ratio and

productivity levels can be used by management to determine "value." In functions such as marketing or public relations, proxy measurements (i.e., sales volume) can be used to determine value.

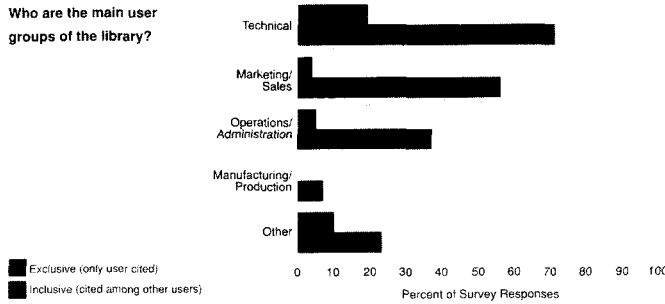
But libraries often exist simply because a firm is so informationally intensive it could not survive without a library, or because a

CEO or highly-placed individual pushed for the library's establishment and insists on its maintenance.

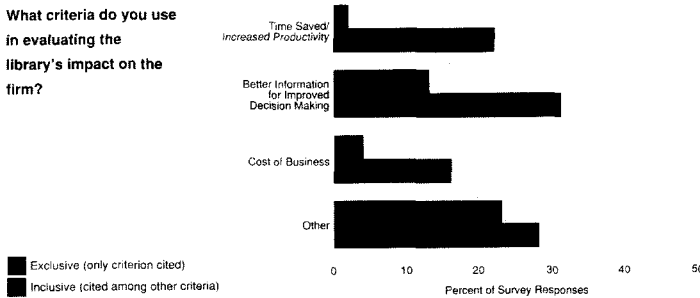
Without formal value measurements, the library becomes vulnerable if this individual leaves the firm or transfers to another operational area. In a study of five corporate libraries that were "closed," Matarazzo³ demonstrated that failure of the library manager to formally evaluate library services had serious impacts: Corporate management was forced to make a less-than-informed decision about terminating the library service during a period when senior managers were suddenly asked to

evaluate all services closely for retention. Curtis and Abram,⁴ in response to this study of closure, said, "A library's output has to be measured...in terms of how, and to what extent, the actions of others are made more productive or their decisions successful. Following this reasoning, a library must be measured in value in user terms."

Who are the main user groups of the library?



What criteria do you use in evaluating the library's impact on the firm?



Five-Year Trends

We presented a series of questions to corporate managers on staff size, budgets, computer applications, size of the library, and general impact of the company library on the business. Near-term projections about library/information service roles were developed from those responses.

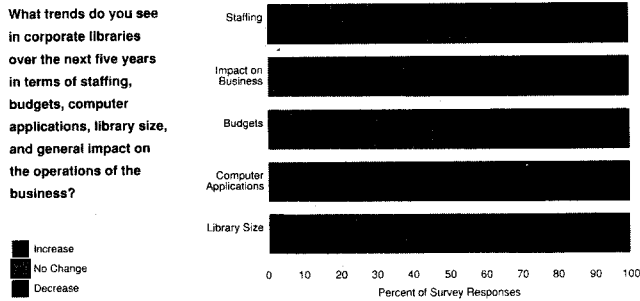
In general, the respondents demonstrated a clear appreciation of the growing importance of information technology for corporate libraries. That appreciation, in turn, influenced other responses. For example, the interviewees expect corporate staffs to grow in the future, but foresee no concurrent growth in library size. That expectation can be explained by the increasing use of information technologies rather than the more space-consuming print products; information storage room can be created without increasing the physical size of the library itself. It might also explain the anticipated growth in staff and budgets.

Approximately 10 percent of the respondents added specific comments about the desirability of end-user searching.

Another 10 percent expected the corporate library to be transferred to the same business organization areas as computer services or records management, because corporations will try to group like functions together.

One-tenth of the respondents want the library to occupy less space. Some projected that CD-ROM technology might make this possible, while others speculated that the increased availability of text-online might accomplish the same goal.

A larger segment (more than 40 percent) of those interviewed on future trends want the library to reach a larger audience and therefore generate greater impact on the business. These



respondents stressed the importance of attracting new users, and several had just shifted the library's reporting role to the marketing area in order to make the library more visible in the company.

The largest number of comments about future trends concerned the increased involvement of the librarian in value-added functions

such as problem analysis and the writing of summary reports. Specific skills mentioned included in-

ternal consulting, problem evaluation, synthesis, advanced research, evaluation of information services and products, and high-level analysis using models and spreadsheets.

Implications

Responses to this survey have led the authors to ask a number of questions about librarians' salaries and career paths, about the implications of increased technological applications, and about the overall information work performed in a corporation.

Questions about salary structure stem from a discrepancy between the ratings of librarians and their salaries relative to those of other specialists. For example, librarians received significant praise for developing and delivering effective services and were also rated highly for responding to changing needs and for making staff more productive. With all of these positive statements, we question why librarians' salaries lag so far behind those of other specialists in most companies. Comparing the SLA salary survey with a similar report for data processing professionals provides one example of this disparity.

Questions about career paths for librarians

arise from our review of the survey respondents' backgrounds. It was our original intention to bypass the company librarians and obtain responses from corporate managers with a reporting responsibility for the library function. It is our belief that we succeeded in the quest. We note that only two of those 164 interviewees—the managers responsible for library functions—had any roots in library and information science. What, then, are the career growth opportunities for successful library managers? Does the track lead the library manager out of the library, in a quest for greater remuneration and a more significant role in corporate decision making?

Technology issues lead to questions about future library positioning and roles. More than 10 percent of those interviewed speculated about the future of library/information services in the corporation. Most of these individuals said the increase in technological applications might lead to relocating libraries in MIS, computer services, data processing, or technical systems departments. If such changes occur, the authors believe that selection of library managers to run these departments is highly unlikely—another potential roadblock

on the librarian's career path.

In addition, the support for technology in libraries, thus far, seems to focus more on saving space and reducing headcount—by substituting equipment for needed staff and space—than on advancing the library function. Based on the projections in the study, we see corporate libraries in the future with smaller staffs, fewer collections, and as little space as possible. Perhaps the librarian may evolve into an information network manager for the firm.

Finally, we wonder who is doing the information work in corporations? Responses to the survey revealed relatively small staffs, even in the corporate libraries of some of this country's largest firms. In some cases, the small relative size of the library staff can be explained by its serving the special needs of an individual, a department, or an area. Still, although it is not our intention to correlate size of staff to size of the corporation, it does seem unusual that these corporations find themselves with staffs of such modest size. Who provides the information in those firms? This question, as well as others raised by the study, can be resolved in future research projects. ■

References

- ¹ MacDonald, Arley Ripin. *Managers View Information*. New York: Special Libraries Association, 1983.
- ² Matarazzo, James M. *Corporate Library Excellence*. To be published.
- ³ Matarazzo, James M. *Closing the Corporate*
- Library: Case Studies in the Decision-Making Process*. New York: Special Libraries Association, 1981.
- ⁴ Curtis, John and Stephen Abram. "Special Corporate Libraries: Planning for Survival and Success," *Canadian Library Journal*, 40, No. 4, August 1983, pp. 227.

Acknowledgements

The authors acknowledge with gratitude the assistance of the following individuals: Michael Gauthier, principal, Temple, Barker & Sloane, Inc.; Carolyn D. Schroeder, technical librarian, Storage & Information Management Group, Digital Equipment Corporation; Debra Maher, associate, Temple, Barker & Sloane, Inc.; Deborah Smith-Cohen, assistant librarian, U.S. Army Cold Regions Research & Engineering Laboratory; and Elizabeth Eddison, Inmagic, Inc. Additional assistance on

this project was received from Linda Willey, Robert P. Rich, Donna Doucette, and Sherry Roess.

We also thank Dr. David R. Bender, executive director, Special Libraries Association, for his support and assistance with this project from its inception.

This project was made possible by a grant from the Special Programs Fund (1987) of the Special Libraries Association and a matching grant from Temple, Barker & Sloane, Inc., a management

consulting firm based in Lexington, MA. Additional funds were received from the Emily Hollowell Research Fund at the Simmons College Gradu-

ate School of Library and Information Science, Mr. Richard Goldberg, and CLSI.

Appendix

We would like to thank the following firms for participating in the survey:

Abbott Laboratories
Aetna Life & Casualty
Agway, Inc.
Air Products & Chemicals, Inc.
Alberto-Culver Co.
Alexander & Alexander Services, Inc.
Allied-Signal, Inc.
Alumax, Inc.
Amerada Hess Corp.
American Express Co.
American International Group, Inc.
American Management Systems, Inc.
American Telephone & Telegraph Co.
Ametek, Inc.
AMP, Inc.
Anheuser-Busch, Inc.
Apple Computer, Inc.
Archer-Daniels-Midland Co.
Armstrong Rubber Co.
Armstrong World Industries, Inc.
Avon Products, Inc.
The B.F. Goodrich Co.
Bain & Company
Ball Corp.
Bell Atlantic Corp.
Bethlehem Steel Corp.
The Boeing Company
Boise Cascade Corp.
Borg-Warner
Braxton Associates
Campbell Soup Co.
CBS, Inc.
Chesebrough-Pond's, Inc.
Chi Systems
Cincinnati Milacron, Inc.
The Coca-Cola Co.
Columbia Gas Systems Service Corp.
Combustion Engineering, Inc.
Commonwealth Edison Co.
Compaq Computer Corp.
Computer Sciences Corp.
Consolidated Edison Co. of New York

Consumers Power Co.
Contel Corp.
Continental Illinois National Bank & Trust Co.
Control Data Corp.
Coopers & Lybrand
Cray Research, Inc.
Cubic Corp.
Data General Corp.
Dayton-Hudson Corp.
Deere & Co.
Deluxe Check Printers, Inc.
Digital Equipment Corporation
Dow Chemical Co.
Dow Corning Corp.
Dow Jones & Co., Inc.
E-Systems, Inc.
Eastman Kodak Co.
Eaton Corp.
Ecolab, Inc.
Englehard Corp.
Equifax, Inc.
Ernst & Whinney
Ethyl Corp.
Farmland Industries, Inc.
Federated Department Stores
Flour Danial, Inc.
General Dynamics Corp.
General Mills, Inc.
General Motors Corp.
General Public Utilities Corp.
Georgia-Pacific Corp.
Gillette Co.
Goldman, Sachs & Co.
GTE Corp.
Gulf States Utilities Co.
Harvest States Cooperatives
Helene Curtis Industries, Inc.
Henkel Process Chemicals, Inc.
Hercules, Inc.
Hewitt Associates
Hospital Corporation of America
Ingersoll-Rand Co.

Inland Steel Co.
 Intel Corp.
 International Paper Co.
 Irving Trust Co.
 ITT Corp.
 James River Corporation
 John Hancock Mutual Life Insurance Co.
 Johnson & Johnson
 Johnson Controls, Inc.
 Kemper Corporation
 Kerr-McGee Corp.
 Ketchum Communications, Inc.
 Kline & Co., Inc.
 Land O'Lakes, Inc.
 Laventhal & Horwath
 Eli Lilly & Co.
 Lockheed Corp.
 Loral Electro-Optical Systems, Inc.
 Manville Sales Corp.
 Marmon Corp.
 Marriott Corp.
 Massachusetts Mutual Life Insurance Co.
 May Department Stores
 McDonnell Douglas Corp.
 McGraw-Hill, Inc.
 MCI Communications Corp.
 Mead Corp.
 Mead Data Central, Inc.
 Media General, Inc.
 Medtronic, Inc.
 Mercer-Meidinger-Hansen
 Metropolitan Life Insurance Co.
 Minnesota Mining & Manufacturing Co.
 Monsanto Co.
 Moore Business Forms, Inc.
 Morrison-Knudsen Co., Inc.
 Motorola, Inc.
 Mutual Benefit Life Insurance Co.
 National Semiconductor Corp.
 Nationwide Advertising Services, Inc.
 Navistar International Corp.
 NBD Bancorp, Inc.
 NCR Corp.
 New York Times Co.
 NL Industries, Inc.
 Northeast Utilities
 Noxell Corp.
 NYNEX Corp.
 Occidental Chemical Corp.
 Ogden Food Products Corp.
 Ogilvy & Mather
 Ohio Edison Co.
 PACCAR, Inc.
 Pacific Resources, Inc.
 Pennwalt Corp.
 Philip Morris, Inc.
 PPG Industries, Inc.
 Prudential Insurance & Financial Services
 Rockwell International Corp.
 Rohm & Haas Co.
 Rorer Group, Inc.
 Safeway Stores, Inc.
 Scott Paper Co.
 Sears, Roebuck & Co.
 Security Pacific National Bank
 Sherwin-Williams Co.
 A.E. Staley Manufacturing Co.
 Stanley Consultants, Inc.
 Sunkist Growers, Inc.
 Texas Eastern Corp.
 Thom McAnn
 TRW, Inc.
 Union Carbide Corp.
 Unisys Corp.
 Varian Associates
 Wal-Mart Stores, Inc.
 Warner-Lambert Co.
 Wells Fargo & Co.

Professor James M. Matarazzo teaches at the Simmons College Graduate School of Library and Information Science, Boston, MA. Laurence Prusak is a principal with Temple, Barker & Sloane, Inc., Lexington, MA.

Strategies for Success (or Opportunities Galore)

by *Betty Eddison*

In 1986, Frank Spaulding, then president of the Special Libraries Association, appointed a Presidential Task Force on the Value of the Information Professional. The Task Force was charged with investigating approaches to determine the value of information and the value of the information professional. The report of the Task Force was presented at SLA's 78th Annual Conference in Anaheim, CA on June 10, 1987. Highlights and the concluding section of the Task Force report, plus ordering information, are elsewhere in this special issue of *Special Libraries*.

The Task Force report provided descriptions of valued information professionals as part of the areas indicated for further research. This article reports on a preliminary search to collect additional examples of information professionals who are currently recognized in their organizations for the value of their work. More than 25 people generously shared their often exciting stories with me (a list of some of them is at the end of this article). No one has been quoted directly and no statements are attributed to a specific person interviewed.

As I roamed around the country via the telephone, I found a number of similarities in what people reported, both in terms of their accomplishments, how they have positioned themselves in their organizations, and also in the words of wisdom they want to share with their colleagues. Although not everyone with whom I spoke was able to report complete success in demonstrating their value to their orga-

nizations, a large majority of them are doing so to a significant degree.

These are some of the themes which ran through the conversations:

- Know your organization, its structure and language, its players.
- Know your organization's goals, objectives, and strategies.
- Position your department, the library or information center, so that it is clearly connected to plans for achieving the organization's goals, objectives, and strategies.
- Know your organization's industry and its competitors in that industry.
- Know your boss's strengths and weaknesses.
- Know your strengths and weaknesses and those of your staff.
- Prepare plans—business, marketing, financial, operations—for the library/information center. These are plans for your use as you strengthen the position of your department.
- Find yourself a champion and one or more mentors.

- Make something happen. What is your compelling vision and can you translate it into reality?

Know Your Organization, Its Structure, and Its Players (or Learn the Team Rules and Get to Know the Team)

To be an information leader in your organization, define your objectives, target your audiences, define your message, plot your strategy, set your timetable, and get to work! An important part of defining your objectives is to know your organization so that you can position yourself and the library/information center in a way that is clearly connected to plans for your company's progress toward its goals and objectives.

One way to find out about the team and its players is to study the organization chart. Describe each person's function, and how that function relates to you and the library/information center. Record any professional, sports, civic, or other interests you may already have discussed with each person. Note anything which could be useful as you work to strengthen an alliance with each person. Build relationships, even casual ones, with several people who are closely allied to a person whom you need to influence—you may be surprised how useful that will be. Find out and add to the chart or file the names of the people you don't know as yet, and then decide if you should get to know them, and if so, how.

Here is what one colleague reported as a successful process for learning about her organization:

- I studied my organization in the same way I study our competition. I looked at our company's annual reports for the last five years, and made a chart, based on what I found in the reports, of the stated goals and announced strategies for achieving those goals. I looked at the financial reports to see what they could tell me about the company's plans. I read about what the company was saying to its stockholders about the

company' focus and whether it had plans to change. I also checked for information about acquiring other companies, selling divisions, and moving into another market or into another part of the world. I studied the industry of which we are a part. After all that, I had an increased understanding of the structure of our own company.

If you carry out a similar exercise for yourself, consider sharing the results with your boss, your staff, and other departments. Include them in this increased understanding as you keep that chart or file up-to-date. Not all departments see a company as the same whole; perhaps your analysis will help those who see it differently. Discussing the result with you will certainly increase their understanding of the services the library staff can provide.

"Part of every image is formed in business and professional life just as it is in social life—by association. Who do you know, where are you seen? It's the company you keep that makes people feel they know and trust you. Do you attend staff meetings or departmental planning sessions? Have you been in the right places to see to it that information costs/benefits are factored into new products and projects? Do you find out about new product design and new programs after the fact?"

"If you think you are left out of meetings that you could contribute to and benefit from, it's time to write a memo and meet with your manager to discuss the problem. If you can't get the door open that way, try the 'account executive' approach."

"Assign a staff member to all significant (i.e., information using or needing) departments. Each account executive systematically gets to know the people and plans of that department. Initially, the account executive carries out an information needs analysis. As the department being analyzed becomes aware of its information needs as demonstrated by the account executive from the library, com-

munication will improve astronomically, and so will the library staff's Image Quotient."

"Don't have enough staff to do it all? Then set a priority scheme, picking out the department to approach first, and do it one bit at a time, but take action. All the well thought out brochures on how to use the library, all the newsletters from the library on 'how we do it good,' don't work as well as a good information professional who is listening to a colleague's information needs."¹

There are rules and regulations throughout organizations. Some are written, some unwritten. Some are essential parts of the culture and power structure of an organization. Find a mentor, if you don't already have one, who can help provide knowledge and understanding about these rules and regulations. You can have one, or several, or many mentors, and they don't all have to belong to the organization in which you are working. You're looking for guidance and experience resources from people who are willing to support you.

Maybe a mentor on paper can be useful: *The Portable MBA*, by Eliza G.C. Collins and Mary Anne Devanna,² provides understanding of the language and environment of business today. The book, a collection of concentrated seminars taught by leading people from Columbia, Harvard, M.I.T., Stanford, Wharton, and others, covers the full range of business organization subjects: management of people and resources, financial management, marketing and strategic management, and operations and production management.

Marketing Planning and Programs

According to Sam Ruello, national vice chairman of Coopers & Lybrand's management consulting services, "...the way top executives manage information in the 1990s is going to have serious impact on a company's ability to compete."³ Librarians and information managers have opportunities to improve their organization's ability to compete if they

effectively market the information services their departments offer.

Here are examples of what some colleagues are saying and doing:

- When times were toughest, about eight years ago, the Library manager decided, on her own initiative, to produce profiles of the company's competitors. She had decided to present these to top management in her company in order to contribute to the company's planning process. She and her staff gathered the information, and then formatted and published it in-house. The competitive profiles were well received and considered valuable. Now there are five volumes of the profiles, and a full-time staff member who keeps them up-to-date.
- I constantly illustrate the benefits customers receive. There are occasions when the work done by the library staff is especially commended for its support of a particular study or proposal or project. If the first commendation is spoken rather than written, I always ask "What was the impact of the work we did for you on the study/proposal/project?" The resulting written commendation specifies the particular values provided, such as "enabled us to complete the study/project significantly ahead of schedule," or "provided information not uncovered directly by the staff of the study/project," or "gave us assurance that we had covered all databases." Prompt your clients/customers to put it on paper and to specify impact. Ideally, real cost/benefit evaluations will or could result. Also, written subjective impact statements have value at performance appraisal time.
- We think of the library as a business with products. We define particular products we offer to our in-house customers. For example, we provide a 'company backgrounder' for any pub-

lic company. We include the most recent annual report and 10-K, a report from an investment analyst, and news articles for the last six months in each background. The first page of each background, the cover sheet, summarizes the information in the background, either in written text or in charts.

- We always, always, deliver what is promised by the time promised even if the money has to come from the Information Center's overhead budget.
- I was asked if the Information Center could provide a filing service for the company's law department. Their looseleaf services needed attention. I said yes, we would take that on as additional responsibility after hiring the right person. Now a full-time member of my support staff does filing of looseleaf services for the law, personnel, tax, and other departments, giving us a conduit into those departments at all times. Our filing service is well regarded and that has made it easy for us to make our information services well known to the departments.
- For the past nine years we have been using a slide/tape program to promote our services to users in Corporate Orientation, the Information Center Class, Information Center tours, and divisional presentations. It had become outdated and we wanted to use video tape to tell our story.

I asked for the entire video budget in one budget year and was turned down. I tried again the next year, splitting the costs over two budget years. The request was approved. When we made the first presentation of the new video to top management, we received a standing ovation.

In June 1989, we distributed 100 copies of that 14-minute video to our major U.S. and international company

locations. The purpose of the video was to describe our information services and to promote use of them by non-headquarters managers. In the five months since then we have heard directly from 30 locations which mentioned the video and then asked for help in finding information. We plan a comprehensive survey of all video recipients. The results will be reported to management in early 1990. A five minute version of the video was made for corporate orientation and has been used with our print materials to promote our services to new hires.

- The customer is always right. We give extraordinary service by which we developed a reputation of a quality organization which delivers results in a timely fashion. We have grown from a one-person library in 1985 to a staff of 8 (3 professionals, 1 paraprofessional, and 4 support staff), which provides basic and advanced information services, manages the company's records, and also manages the corporate museum and company archives. Managing the company's marketing materials and supplying external information for the new Executive Information Service are also part of the Information Center's responsibilities.
- We make presentations regularly. We always begin this way, "Hi, I'm _____ from the Information Center. I'm going to tell you how we can make your job easier." We use overhead transparencies prepared for a particular department so that they know we are aware of the information they need. We use a variety of other presentation skills as well. We talk in our customers' terms, not in library or research terms. We market all the time. We keep the name of the Information Center and the perception of the value of its services in front of the folks all the time. Frequently presentations are made to

clients at the request of project managers who want to impress clients with the company's information management capabilities.

- We have created a brochure with the help of our Marketing Department. We told them that the underlying themes we wanted to convey in the brochure were knowledge, experience, loyalty, dynamism, cost-effectiveness, and professionalism. The entire library staff worked as a team in developing the themes and the Marketing Department designed the brochure and the logo. The cover sheet of all of our information products matches the cover of our brochure. We use the logo on our user aids, letterhead, and computer paper as well. We have achieved product identification in this way. Customers throughout the company recognize when they get something from the Information Center.
- The value of what we do is perceived by industry specialists within our company who now receive comprehensive information. Prior to the Library's existence, they didn't know what they were missing. In the 12 months since the Library started, we have gone from one professional librarian to three, and are interviewing for a fourth. We have grown from two on the clerical staff to five plus a secretary. We operate in a space of 5,600 square feet.

Financial Planning

Even if your library/information center is carried on the organization's books completely as overhead, it is a good idea to look at the services and processes of the library or information center as you would if asked to function on a complete operational cost recovery basis. You may find that those services and processes look differently to you under those circumstances. And if you are accustomed to

thinking in this fashion, you will be ready should the day ever come when you are asked to do so. In fact, being prepared in this way, you may be able to suggest that this is the appropriate action at a time when it looks as if cost containing actions are about to take place in the company.

Here are examples of what some colleagues are saying and doing:

- The Information Center is 100 percent overhead and corporate in function. The budgeting process is identical for all departments. The Information Center budget is prepared exactly the same way all other budgets are prepared. The Information Center manager prepares a line item budget each year, including budget figures for space, heat, and other environmental considerations, plus staff benefits and salaries, plus materials of all kinds. The manager has been named an agent for procurement by the company's Purchasing Office so that Information Center purchases up to \$5,000 (CD-ROMs, for example) can be made directly from the Information Center, bypassing the Purchasing Office. This has increased the efficiency of both the Purchasing and Information departments.
- Originally the Information Center was financed on a totally overhead basis. Then we were asked to change slightly, to charge back for outside services such as external database searches, document delivery, special purchases. Next came full operational cost recovery including heat, rent, division overhead figure, and so forth.

We became an intrapreneurial business. I knew nothing about costing or pricing our services or marketing for a service which had a price tag attached. I read everything I could get my hands on, spoke to all sorts of people inside and outside of the company. I learned as we went along. We allocated space within the information center to par-

ticular library functions, services, and products, and went on from there to apply other costs to each of those areas. I gave our collection of information resources a closer review than I ever had before to make sure that each item had relevance to our new role as an intrapreneurial business.

The first year we recovered 100 percent of our costs. The number of people using our services had grown enough that we were able to lower our prices because our fixed costs remained the same. The second year we were able to lower our prices again. We are still recovering 100 percent of all our operating costs and have been able to lower our prices a third time.

Having to pay for the information services we provide is a great motivator for people in the company. As customers they perceive they are buying what they need, and that it has value to them.

- We have found that people in our company are willing to pay for our services. They view us as a business, in competition with an outside business, and they know that we know their needs better than an outside business could.

Bosses—Being One and Having One

Peter Drucker divides bosses into two categories: readers and listeners. Try to apply what Peter Drucker says to yourself and to your boss. If you are aware that you are a reader or a listener, let your staff know so they can work with you in the fashion that is best for you. If you don't know which your boss is, find out as soon as possible. Watch carefully to see if you recognize any of these clues:

“If you have a reader for a boss—like an Eisenhower or a Kennedy,” Drucker writes, “don't just go into his office and talk to him about a problem or a project. Write it up first, make sure that you have

something for him to read; then you can start to talk. If you have a listener—someone like Franklin Delano Roosevelt or Harry Truman—don't send in a memorandum. Go in and talk about it first; then you can leave the memo.”⁴

The book called *Managing Your Boss*, by William P. Anthony⁵, a paperback dedicated “to all subordinates in all organizations,” can be a source of lots of ideas. Most bureaucrats, and that includes a lot of bosses, love to follow written policies. Relate whatever you are planning to one of the organization's goals or objectives. Find something in your company's printed policies or guidelines which support whatever it is you want to achieve. Explain exactly how your plan, when implemented, will help the company to get where it wants to be quickly, easily, and maybe even more cheaply. Show how achieving this goal will make your boss look better. Shape the plan so your boss can approve it if possible, without having to go upstairs for approval. Going upstairs will take longer.

Here are examples of what some colleagues are saying and doing:

- I have learned to determine the management style of my boss every time I have a new one. My current boss likes me to be direct and to the point. That's the exact opposite of my previous boss, who wanted me to develop matrices of alternative options.
- If your staff looks good, you look good. When your staff is successful, you shine in the reflected glow of their accomplishments. I make the people on my staff look good. I give them credit, and give myself reflected credit because the person being praised comes from the Information Center which I manage. For example, when a staff member achieves something that management has wanted, I write a letter to the most senior person involved, including the president when appropriate, informing him that so and so of

my staff has accomplished this great thing for the company as part of the services provided by the Information Center.

- We use our corporate newsletter as a technique to help keep morale high. Each month the staff of the Information Center is responsible for a column about the Information Center in the corporate newsletter. Each column talks about some of the services and products offered by the Information Center. I make sure that our staff members take turns writing the column, that each one gets a byline for their column, and that a photograph of the person writing the column is included each month. Sample column titles in recent months: "Business Periodicals on Disk," "YES We Can!" "ABCs of the Information Center," "The 24-Hour Library." Staff members love it. And people in the company learn about the Information Center and about that IC staff member.
- I report to the Engineering Group vice

president, who reports to the chief engineer, who reports to the president. The Information Center is corporate-wide in function. As manager of the Information Center I attend the weekly staff meetings of all managers in the Engineering Department. All of us are made aware of new projects and developments through these meetings and are better able to support each other.

Conclusion

Obviously, information professionals are demonstrating their value all over the country. Remember, there is more to tell. I've only offered highlights of the reports those energetic and creative people gave me. And there are more innovative and visionary colleagues to be heard from. Details about the next stage of this study will be announced later in 1990.⁶ The exploration will continue to look for ideas and practices which add to the perception of value of the information services provided by the information center managed by the information professional. Strategies for success will go on being shared. ■

References and Notes

- ¹ Based on an article in the *Gossage Regan Managers' Memo*, vol. 4, no. 1, Fall 1989. To get on the mailing list for this newsletter, write Gossage Regan Associates, Inc., Room 812, 25 W. 43rd St., NY, NY 10036.
- ² Collins, Eliza G.C. and Mary Anne Devanna. *The Portable MBA*. Wiley: 1989, \$24.95.
- ³ Sam Ruello, national vice chairman of Coopers & Lybrand's management consulting services, is quoted on page 2: "But the way top executives manage information in the 1990s is going to have serious impact on a company's ability to compete and effective use of executive information systems is probably going to be an important key to success for many companies." "Executive Information Systems: Coming of Age in the 1990s," pp. 1-4, *C&L Executive Briefing*, October 1989. Coopers & Lybrand (USA) Communications Department, 1251 Avenue of the Americas, NY, NY 10020.
- ⁴ Quoted in "How to Manage Your Boss" by Martin Lasden, *Computer Decisions* September 1984, pp. 113-116, 118.
- ⁵ Anthony, William P. *Managing Your Boss*. AMACOM: 1983. \$10.95. (Order #7597CCCH a paperback).
- ⁶ If you would like to add your insights, ideas, or experiences to the study, please let me know: Betty Eddison, Inmagic Inc., 2067 Massachusetts Avenue, MA 02140-1338.

Correspondents for This Study

David Day
Blount Inc.
4520 Executive Park Drive
Montgomery, AL 36116
(205)244-4205

Kathy Hubbard
Manager, Information Resource Center
Brown & Root USA, Inc.
PO Box 3
Houston, TX 77001-0003
(713)676-3399

Julia Peterson
Manager, Cargill Information Center
PO Box 5670
Minneapolis, MN 55440
(612)475-6498

Alan S. King
Library Services
Central Maine Power Co.
Edison Drive
Augusta, ME 04336
(207)623-3521

Rita S. Ayers
E.I. DuPont Nemours Co.
Wilmington, DE 19898
(302)892-7132

Anita Dorsett
President, Executive Information Service, Inc.
5320 Gulfton, Suite 11
Houston, TX 77081
(713)665-2667

Stephen K. Abram
Director, Information and Marketing Resources
Director, Administration
The Hay Group
121 King St., W., Suite 700
Toronto, ON M5H 3X7
(416)868-1371

Karen Takle Quinn
IBM
c/o 555 Bailey Ave.
San Jose, CA 95150
(408)463-3608

Ellen Miller
Vice president and manager,
Information Resources
Morgan Guaranty Trust
60 Wall St., 29th Floor
New York, NY 10260
(212)648-7832

Susan Fifer-Canby
Library
National Geographic Society
1146 16th Street, NW
Washington, DC 20036
(202)857-7000

David Scharf
Information Access Center
NYNEX Corp.
111 Westchester Avenue
White Plains, NY 10604
(914)644-6269

James L. Olsen, Jr.
5905 Landon Lane
Bethesda, MD 20817
(301)229-5084

Jean Scanlan
Director, Information Center
Price Waterhouse
160 Federal St.
Boston, MA 02110
(617)439-4390

Arthur E. Berlin
Technical Library
Sanders Assoc., Inc.
95 Canal St.
Nashua, NH 03061
(603)885-4674

Nicholas E. Mercury
Director, Information Services
and Marketing Intelligence
System Planning Corp.
1500 Wilson Blvd.
Arlington, VA 22209
(703)841-3661

Laurence Prusak
Consultant, Information Management Group
Temple, Barker & Sloane
33 Hayden Avenue
Lexington, MA 02173
(617)861-7580

Helen Manning
Texas Instruments Inc.
PO Box 650 12 MS 20
Dallas, TX 75265
(214)997-2135

Betty Eddison is vice president, Inmagic, Inc.

Power to the Information Professionals

by Nancy Prothro Norton

■ After defining empowerment and exploring the reasons why empowerment is a salient issue for the information profession, the author explores the sources of power and powerlessness. Strategies are suggested for increasing position power, knowledge power, and personal power, enhancing the overall power profile of the individual and the profession.

It is ironic that a profession whose strength and viability depend on the realization that information is power finds itself less than powerful and, therefore, vitally concerned with the issues of empowerment.

Why All the Interest in Empowerment?

Empowerment is a concept whose time has come, for members of the information profession and for others. The literature of management and psychology abounds with articles on the concept. And, as Conger and Kanungo point out, the term has taken on a variety of meanings.¹ In one sense, "empowerment" has become synonymous with a set of managerial techniques including the delegation of authority and decentralization of power as embodied in participative management, quality circles, and self-directed work teams. While information professionals certainly have reason to be interested both as managers and as employees in this aspect of empowerment, this article will focus on empowerment as Muriel Regan defined it in her inaugural address as Special Libraries Association 1989/90 President: "understand[ing] our potential [to be] more influential in this information-driven society."²

Empowerment in SLA President Regan's definition is an enabling process—a process of enabling oneself and others by enhancing personal efficacy. This concept of empower-

ment has as its primary goal not the control of increased resources or the ability to influence others (although that may indeed be a result of this type of empowerment), but rather the affirmation of the fact that, through one's own efforts, one can make positive things happen.

Various explanations exist for the healthy individual's desire for empowerment. They include the need for self-actualization,³ the drive for competence,⁴ and the intrinsic need for self-determination.⁵ Why is the issue of empowerment such a salient one for information professionals at this time? Frederick Herzberg's classic article on employee motivation made clear the relative importance of intrinsic motivating power of efficacy-related factors such as opportunity for achievement, sense of responsibility, and possibilities for growth.⁶ More recent studies of the changing characteristics and expectations of today's labor force have reinforced the importance of empowering job factors in motivating initial employment and job satisfaction. While information professionals would naturally be expected to share these requirements with the rest of the labor force, their sensitivity to the issues of empowerment has been heightened by the heralding of the information society or information age. Those for whom information is the professional *raison d'etre* might well have expected to experience an increase in power with the crowning of the information age. To the extent that reality has not fulfilled

that expectation—whether in position titles, job responsibilities, salaries, or respect—the sense of powerlessness is exaggerated.

Understanding the Sources of Power

Power is illusive and multi-faceted. It is tied to independence, control of resources, status, and influence. An understanding of the sources of power is a prerequisite to identifying the causes of powerlessness and effective empowerment tools and techniques. At least three distinct types of power, each derived from a different source, have implications for empowerment of information professionals: position power, knowledge power, and personal power. The presence and strength of these three types of power constitute a person's power profile. People of high power will most likely exhibit strength in all three power types.

In order to improve one's power profile, it is important to analyze one's place on all three power dimensions. A good starting point for this analysis and for developing an action plan to achieve empowerment is a personal style assessment like the Myers-Briggs Type Indicator or the Personal Profile System. Each individual values and is at ease with different types of power to a different degree. Developing a firm understanding of one's own unique strengths and desires will create a foundation from which to comfortably and effectively pursue power-enhancing activities in each of the areas of the power profile.

Position Power

Position power is that legitimate power derived from official position in the organization. Certain types of authority and responsibility are associated with each position, and, while position power does not necessarily create respect, it does confer authority and is a critical part of a person's power profile. Position is a necessary, but not a sufficient, determinant of position power. Position power comprises where one sits in the larger organi-

zation, whom one works with and for, the projects one works on, and one's ability to influence those projects.

Where the library or information center sits in the organizational structure becomes very important when one considers that the librarian's position power is in part determined by organizational reporting relationships. The librarian who reports to the vice president for Research automatically has, by association, more position power than the librarian who reports, along with the managers of maintenance and food services, to the supervisor of Plant Services. Knowledge of an organization's political landscape and power structure will help the librarian lobby for the most advantageous reporting relationship with a resulting boost in position power. And, along with position on the organization chart, physical location of the library and the librarian's office also play a role in determining position power. A study by Rosabeth Moss Kanter determined that perceived power is increased by centrality of physical location.⁷ Librarians have known for some time that library use falls off as distance to the library increases. Now it is known that position power declines as well.

Position power is also linked to what librarians call themselves and their function. This may be the real issue at stake in the debate about whether to rename the library an "information center" or "corporate intelligence center." Perhaps librarians are acknowledging the past lack of position power associated with the name "library" or "librarian" and are attempting to carve out for themselves a fresh and more powerful niche in the organization. Every librarian has heard colleagues recount the promotions and salary increases that followed the assumption of new job titles like information analyst or senior information resources consultant. While some adamantly cling with strong logic and principles to the title "librarian," members of the profession should also be sensitive to the position power dimension of the debate over what others call them.

Another determinant of position power is the range and level of one's professional con-

tacts. Efforts to increase interactions with empowered and empowering people will pay dividends. The Kanter study cited above confirmed that power is increased by contact with senior officials.⁸

There are several ways to promote such contacts including seeking out projects in the organization that will require contact with those in power and visibly participating in professional programs, conferences, and meetings. Leadership in community affairs is an additional source of position power that will spill over into the work environment. A special mentor relationship with a powerful individual also promotes empowerment. Studies have shown that, regardless of their position in the organization, mentored people of both sexes reported having increased influence over organizational policy, increased access to important people, and control over increased resources as a result of their mentoring experience.⁹ Choose a mentor whose level and application of power is worthy of admiration, and explore with him or her the avenues of empowerment that are successful within the organization. Such dialogues with the powerful will provide keys to effective empowerment techniques and valuable warning of hidden mine fields in the road to power.

Information professionals do, in fact, already have positions of great power in the organization to the extent that they establish two key roles for themselves:

- Gatekeepers of the flow of vital information within the organization; and
- Those who fashion useable, manageable information from the overwhelming flood of data.

Information may be power, but control and transformation of information are the ultimate sources of power. In *The Leadership Challenge*, Kouzes and Posner assert that the amount of power a person possesses is a function of "(1) ability to perform important tasks and (2) the degree of discretion and visibility associated with the job."¹⁰ If this is true, several lessons are clear. First, it is in the librar-

ian's best interests to become a more vital part of the organization's power structure, taking on high visibility/high risk projects. There exists within each organization a shared awareness of the truly critical projects or functions—those that affect the whole organization's viability, well-being, or growth. These are the organization's most central tasks and critical problems. The information professional must look for opportunities to become an integral part of the teams addressing these problems. In addition, libraries should develop information products and services specifically targeted to meet the needs of top management in order to increase their direct appreciation of and dependence on the library. In many organizations, it becomes all too apparent in the budgeting process that those who have final approval over the library's budget are not direct users of the library's services. While appreciation of the library's many uses may percolate to the top levels of the organization, it is preferable for the decision-makers to have a firsthand appreciation of the value-added services that are financed through the library budget.

Returning to Kouzes and Posner's statement, the next lesson is to increase and make visible the degree of discretion exercised in fulfilling one's roles. At first glance, this may seem like a difficult task since so much of the information professional's strength comes from building and using standardized systems for information storage and retrieval and since so much of library service appears to be routine. There is, however, a great deal of creative problem-solving that goes on in meeting the user's needs, and librarians should not hesitate to make that fact known to the clients. Library managers can exercise their discretion in three key ways:

- By setting organizational information policy;
- By controlling their own budget and using it as a tool to promote the value of information services to the larger organization; and

- By becoming a strategic planner of the organization's information infrastructure and sharing that vision with the larger organization.

These activities are standard ways of manifesting influence and will lead to a perception of increased power for the librarian's position. Furthermore, in addition to involving themselves with important tasks and directly serving important people, information professionals should seek out higher power roles in their organizations. The emerging roles of chief information officer or information resources manager are positions special information professionals are uniquely qualified to fill for the benefit of the organization and for the enhancement of their own position power. Career planning is a key tool for defining the knowledge base executive and management positions require and for systematically acquiring the qualifications and political backing necessary to achieve these positions.

Finally, Kouzes and Posner refer to the power of visibility. Special librarians routinely and superbly perform both their gatekeeper and information analyst roles for the benefit of the larger organization. But they have much to do in terms of expanding, capitalizing on, and publicizing those roles. Successes should be celebrated publicly. Because librarians often function as part of a larger project team, their valuable contributions may not receive appropriate recognition unless the librarians ensure that they do. When a librarian's work saves the company money, prevents a liability situation, or makes a manager look good, the library needs to publicize its role in that accomplishment and look for opportunities to provide those same services to others. Specifically, libraries should analyze their achievements and actively seek opportunities to provide those same services to others. This process involves identifying actions that will make those opportunities happen, as well as planning to capitalize on them when they do occur.

In order to ensure actions aimed at enhancing position power are meaningful and are not just attempts to gain power for power's sake,

each information professional must first define for her or his functional unit what Block, in *The Empowered Manager*, calls a "vision of greatness." It is important the vision be grounded in the belief the profession has something to offer the larger organization that will, in Block's words, "truly make a difference."¹¹ Block's prescriptive requirements for that vision seem to be created especially for the information profession: "pursue mastery, meaning, contribution, integrity, service."¹²

Knowledge Power

The second key type of power, knowledge power, is a product of the person's unique expertise. Although this area ought to be a strong suit for information professionals, there are disadvantages to overcome, not the least of which is that everyone has used a library at some time in their lives and, therefore, assumes their expertise is sufficient to their information tasks and possibly equivalent to that of the information professional. This is, unfortunately, a case where all the old adages—about a little knowledge being a dangerous thing and familiarity breeding, if not contempt, certainly a lack of appreciation—hold true.

Technology is also working against the librarian's perceived knowledge power in some ways, with end-user searching making it easy to retrieve at least *something* from a database search, leading the client to believe yet another one of the information professional's unique skills is easy to master. Commercial database vendors have seized upon end-user searching as the key to enlarging their market which, heretofore, was a wholesale business only, with the librarian as the retail outlet. Information professionals even aid in this process by encouraging end-user searching and teaching their clients the basics.

In his seminal paper on the teacher versus intermediary roles for the librarian in online searching, Nielsen raised the question of self-concept and professional status and related them to the symbolic power of what information professionals define as their "core

tasks.”¹³ The degree to which others are dependent on a person’s knowledge or ability is one measure of power. While the librarian’s sense of service may increase when teaching is the core task, his or her professional knowledge power suffers. As Nielsen notes, “The intermediary role, if fully implemented, would provide considerably more status value to librarianship than the instruction role, just as the doctor has higher status than the teacher. By allowing users to become their own question-answerers, instruction advocates to some degree blur the distinction between librarian and layperson, a blurring that has caused problems for those anxious about the occupation’s status.”¹⁴

Fortunately, instruction has never been as central a role for the special librarian as it has been for the school, university, or even public librarian. Nielsen calls for a humanistic merging of the two roles in some as-yet-undefined way. The profession needs to approach that challenge with full awareness of the implications for others’ assessments of its knowledge power. As the vision of electronic libraries becomes reality, the question of core tasks for the profession becomes critical, and answers to that question will determine how big a part knowledge power plays in the profession’s future power profile.

There are, fortunately, a number of steps information professionals can take to increase their actual and perceived knowledge power. First, they can develop and market more professional information services that have a high value-added component. Librarians need to demonstrate that their expertise goes far beyond looking up telephone numbers or finding a few recent articles on a topic. Second, they need to establish themselves as the information technology experts in their organizations and exercise leadership in defining and meeting needs with new technologies. Librarians that hesitated in purchasing that first CD-ROM product because it was expensive and because there wasn’t really a package out that met specific user needs did themselves a disservice by not recognizing the knowledge power associated with being the one to introduce new “gee-whiz” technology to the or-

ganization. The library should serve as consultant-at-large to the organization in designing information management systems that appropriately utilize and integrate new technologies.

Third, charging for services, while an anathema to some, is an effective way to have one’s expertise validated. Free services are often undervalued, and services funded through overhead, as libraries often are, are frequently perceived as free. Many libraries have experienced increased appreciation of the information professional’s expertise and a growth in demand for services as a result of instituting charges for value-added services. Last, in order to maintain and increase their knowledge power, librarians must commit themselves to lifelong learning. Continuing education is critical to a profession whose power profile so heavily depends on knowledge power and whose work environment constantly changes. Continuing education programs should include not only technical areas and new technologies, but also management tools like effective communication, project management, strategic planning, marketing, problem-solving, and decision-making skills.

Personal Power

The third type of power—personal power—derives from the personal characteristics of the individual. In contrast to the first two types of power, which are concerned primarily with *function*, personal power is primarily a matter of *style*. It is in this area of the power profile that librarians both suffer from negative stereotypes of the past and have also the most freedom to empower themselves in the future. Two of the most traditionally powerless groups are people at low levels in the organization and women.¹⁵ Librarians are doubly disadvantaged by falling characteristically into both groups, making achieving personal power all the more important. Reversing the unfortunate characterization of the librarian as an unassertive female servant is the key to increasing personal power. The first step is to become more aware of one’s own personal style

and of the behaviors one exhibits that advertise feelings of powerlessness. These behaviors range from body language to speech mannerisms to styles of dress.

Why is it that librarians can usually recognize each other in a crowded airport? The answer has a lot to do with the image of personal powerlessness they project. Studies consistently show that nonverbal communication contributes much more to the message being conveyed than either words or tone of voice. Body language too frequently undercuts the librarian's position and knowledge power instead of enhancing it. Librarians need to feel comfortable about "taking up space," they need to learn stances and positions that enhance power. They need to stop introducing new ideas with phrases like "I think maybe..." and "I don't know if this will work but..." They need to stop ending sentences with audible question marks telegraphing their lack of self-confidence and undermining others' confidence in them. And they need to abandon the belief their knowledge power is so high that it alone is sufficient to produce an effective power profile.

"Dressing for success" is as valuable an empowerment tool for librarians as for members of any other profession. The Special Libraries Association has pioneered a number of excellent programs and studies on the profession's image that should be taken to heart. The profession's continuing education should include seminars on professional image and power communication. Projecting energy, enthusiasm, and vision are key ways to exercise leadership and achieve empowerment.

Barriers to Empowerment

Once the profession has acknowledged empowerment as its goal, each member needs to ask herself or himself, "What could stand in the way of achieving this goal?" The answers

are not surprising: a lack of understanding of the sources of power, lack of training and rehearsal which contribute to a fear of failure, fear of risk-taking, and behavior by others that reinforces personal powerlessness. None of these barriers are strong enough to withstand a concerted attack, however. This article is intended to increase awareness of power issues and knowledge of power sources. Librarians can help each other by serving as sounding boards for these new goals and behaviors. They can encourage each other and celebrate their empowerment successes. Furthermore, they can encourage themselves through positive self-talk and a commitment to set meaningful, realistic, and incremental empowerment goals.

The Benefits of Empowerment

The personal benefits of empowerment include an exhilarating feeling of efficacy and higher job satisfaction. Kouzes and Posner conclude that empowered people "feel strong, capable and committed."¹⁶ In fact, the subtitle of their book, *How to Get Extraordinary Things Done Through People*, reflects the potential benefits of empowerment to the organization. When power in an organization is not viewed as a zero-sum game, that is, when power is multiplied as it is shared, rewards include increased initiative and ownership, better ideas and problem-solving, and better acceptance of change.

Muriel Regan is correct in recognizing that the time has come for information professionals to empower themselves. As she notes in her article in this issue, "Power can be given, taken, or assumed—and there is much special librarians can do to take it or assume it for themselves." Before the information profession can change others' perceptions, it must first change its vision of itself. ■

References

- ¹ Conger, Jay A. and Rabindra N. Kanungo. "The Empowerment Process: Integrating Theory and Practice." *Academy of Management Review* 13 (no. 3): 471-482 (July 1988).
- ² Regan, Muriel. "Inaugural Address of the 1989/90 President" in *Special Libraries Association 1988/89 Annual Report*: 19.
- ³ Maslow, A.H. *Motivation and Personality*. New York: Harper. 1954.
- ⁴ White, R.W. "Motivation Reconsidered: The Concept of Competence." *Psychological Review* 66 (no. 5): 297-333 (Sept. 1959).
- ⁵ Deci, E.L. *Intrinsic Motivation*. New York: Plenum. 1975.
- ⁶ Herzberg, Frederick. "One More Time: How Do You Motivate Employees?" *Harvard Business Review* 46 (no. 1): 53-62 (Jan-Feb 1968).
- ⁷ Kanter, Rosabeth Moss. "Power Failure in Management Circuits." *Harvard Business Review* 57 (no. 4): 65-75 (July-Aug 1979).
- ⁸ Kanter, 67.
- ⁹ Fagenson, Ellen A. "The Power of a Mentor." *Group and Organizational Studies* 13 (no. 2): 182-194 (June 1988).
- ¹⁰ Kouzes, James M. and Barry Z. Posner. *The Leadership Challenge*. San Francisco: Jossey-Bass. 1987. 171.
- ¹¹ Block, Peter. *The Empowered Manager: Positive Political Skills at Work*. San Francisco: Jossey-Bass. 1978. 99.
- ¹² Block, 87.
- ¹³ Nielsen, Brian. "Teacher or Intermediary: Alternative Professional Models in the Information Age." *College and Research Libraries* 43 (no. 3): 183-191 (May 1982).
- ¹⁴ Nielsen, 187.
- ¹⁵ Kanter, Rosabeth Moss. *Men and Women of the Corporation*. New York: Basic Books. 1977.
- ¹⁶ Kouzes and Posner, 11.

After serving as director of the Information Services Division of Martin Marietta Energy Systems, Inc., for nine years, Nancy Norton is currently enjoying a developmental assignment coordinating succession planning and organizational development initiatives for the corporation. Norton received her M.L.S. degree from the University of North Carolina at Chapel Hill and is a former Library of Congress intern. In June 1989, she received the Management Academy Leadership Award from the Library Management Division of Special Libraries Association.

Leadership Can Be Learned

By Susan S. DiMattia

In his recent book, *On Leadership*, John Gardner could easily have been talking directly to all of us, information professionals. Although the information profession is faced with threatening problems, it doesn't seem to be acknowledging, or reacting to, the urgency of any them. "We are anxious but immobilized," he states.¹

To gain some inspiration and motivation for the tasks facing information professionals, and to make connections with some of the points made by colleagues earlier in this issue, I re-read some favorite management literature and read some new works for the first time. One fact which became immediately obvious is that focus in the literature has shifted from "management" to "leadership." The new term has a more positive, less manipulative connotation; it is also applied up and down the spectrum of an organization. You don't have to be top gun to be a leader.

Gardner says large, intricately organized systems can't call the shots. Individuals at all levels have to be ready to "exercise leader-like initiative and responsibility."² In the same vein, in a discussion of the myth of leadership as a superior position in *The Leadership Challenge*, Kouzes and Posner say that leadership is a process, not a place, involving skills and abilities which are just as useful on the front line as in the executive suite.

In *The Leadership Factor*, John Kotter touches on a nerve, which may be the whole key for the information professional. At the

middle management level and lower, leadership requires high energy level and a *desire* to lead. The question is, does each one of us have the desire?

Likewise, as far back as 1975, Michael Korda, in *Power: How to Get It, How to Keep It*, states people do not admit they want power, which is why they don't get it. We've come a long way Michael; information professionals want it. The problem is, they have to want it badly enough to go after it and work hard to keep it.

Gardner says "Leadership requires major expenditures of effort and energy—more than most people care to make."³ To find solutions to the threatening problems, special librarians need focused energies and sustained commitment.

In a discussion of power and public figures in *The Alexander Complex*, Meyer says most public figures are too purposeless and therefore too powerless to leave their mark on history. Are information professionals too purposeless to leave a mark on their organization, or on a larger scale, the information society?

We're faced with choices. As a profession, special information professionals have, for years, been asking their association to help boost their image, value, the perception of that value, to make "them" (management, nonlibrarians, the world at large) understand the qualifications and capabilities of a special information professional. After two SLA

Presidential Task Forces, one on the value of the information professional and one on the image of those same professionals, special librarians are left with one, inescapable conclusion. It is up to every individual to decide whether he or she wants the recognition, prestige, and power enough to work for it.

No one else can make a difference for us. SLA can do studies, run seminars, publish guidelines, and a host of other things to help information professionals with ideas, moral support, etc., but no one can make a difference in how we are perceived in our little corner of the world. It's up to special librarians to put on the mantle of leadership and work like crazy to achieve for ourselves.

The ideas expressed in Betty Eddison's article in this issue can be a rallying point and source of inspiration, but the success her correspondents are experiencing will not translate directly to other special libraries unless they work just as hard, or harder than the correspondents. Nancy Norton hasn't been successful because of what any outside group has achieved; she has been successful because she called on all of the leadership traits she possesses and applied them to the needs and realities in her environment.

What prevents us from perceiving ourselves as leaders? Do we believe that leaders have to be heroic, charismatic, in the public eye, and responsible for large organizations, institutions, and even states or nations? Few of us have the charisma of a Lee Iacocca. We haven't, like Lech Walesa, stood up for what we believe, against incredible odds, suffered for our stand and finally had scores of our peers recognize us as their leader. Only a relative handful of people have ever been elected, or even nominated for significant political office.

In her most recent book, *When Giants Learn to Dance*, Rosabeth Moss Kanter says "no lasting achievement is possible without vision, and no dream can become real without action and responsibility."⁴

Vision. Action. Responsibility. Those words bring to mind images when applied to people. What other words do you associate with the word "leader?" Michael Meyer lists

vision, leadership ability, willfulness, extraordinary energy, and focus as common traits of today's leaders. Marz and Sims, in *Super-Leadership*, say their subjects have creativity, innovation, and the ability to respond to environmental shifts. Doesn't sound unreasonable to achieve.

There are two interrelated aspects to the leader's role, according to Maccoby in *The Leader*. He or she must exercise power efficiently and wisely and must present, through action, appearance, and articulated values, a model that others are willing to follow. Gardner presents a list of tasks of leadership, including envisioning goals, motivating, achieving trust, explaining, and representing the group. He continues by saying that we shouldn't confuse leadership with status; the top ranking person may be bureaucrat #1, but may not be able to lead a group of seven-year-olds to an ice cream counter! In other words, it's possible to have power and not be a leader.

Kouzes and Posner say that energy and enthusiasm, not charisma, make up leadership. You don't have to be Lee Iacocca or president of the United States, with thousands of followers and admirers in order to be a leader.

Is that what has been holding many of us back? We don't see ourselves as charismatic or heroic. Kotter talks about Lee Iacocca and Chrysler. Iacocca's methodology, and that of any successful CEO is the same as what works for a team leader ten layers below:⁵

- **A vision**—of what should be, that takes into account the legitimate interests of all people involved;
- **Strategy**—for achieving the vision, recognizing all the broadly relevant environmental forces and organizational factors;
- A cooperative **network** of resources—a coalition powerful enough to implement strategy;
- A highly **motivated** group of key people.

Kotter goes on to say that few firms have sufficient staff with these skills and assets.

Although somewhat dated, *The Leader*, by Michael Maccoby, also echoes the theme that teams at all levels need leaders. This need opens up a vast array of opportunities for people who have never before thought of themselves as leaders. In fact, the new opportunities demand that each and every one of us sharpen our leadership skills.

Marz and Sims say lifelong learning is no longer a luxury, but a necessity. Throughout management literature, many words appear repeatedly in descriptions of the characteristics and functions of leaders. The most important point, for information professionals, is that leadership can be learned, and they have the qualities and resources to learn it.

Crosby (*Leading: The Art of Becoming an Executive*) expresses a similar sentiment in an appealing way. One of the requirements for becoming a successful leader, he says, is to make time to sit and read and learn more about the tasks at hand. In his opinion, those who are able to keep learning, keep progressing.

Bradford and Cohen (*Managing for Excellence*) say that the growing complexity of tasks virtually ensures no one person can have all of the knowledge necessary to handle any given task. Information professionals to the rescue!

Dialog has been distributing a calendar/poster for 1990 with a large picture of the front-end of an Edsel. The caption reads, "Don't Let It Happen Again." The implication, of course, is that with Dialog products and services, you will make informed decisions and avoid catastrophic mistakes.

Korda includes "information" in his discussion of power:

"More important still is the control of information. Almost everybody is dependent on the supply of information, yet 'information input' is usually regarded as a clerical task, ... Hours are spent in discussing major questions of policy, but the information on which these decisions have to be made is sought after in the most casual way."⁶

Such a situation would not occur in an organization where the information professional is a leader! ... and Korda acknowledges it. "Those who play the power game... not only obtain and control information, they know how to make it practically incomprehensible."⁷

That brings us back to Muriel Regan's warning early in this issue that information specialists give away their expertise and make their jobs sound too easy. According to Nancy Norton's three power dimensions, special librarians have diluted their knowledge power. The hesitancy and destruction has got to stop.

Heller takes the information question a step further. He explains managers not only look for perfect information, but perfectly analyzed and interpreted information—an extra step that almost never happens, according to Heller. Possibly, if special librarians accept the challenge in Jim Matarazzo and Larry Pruzak's study, where respondents didn't see librarians as analysts of information, managers will learn to trust and respect the analysis and interpretation of information they receive from librarians.

Kotter offers a perfect selling point for information professionals' services and expertise. His opinion is that without knowledge it's not possible to produce good vision or smart strategies, and of course without that ability, businesses can't survive profitably for long.

Kotter also says, "Great vision emerges when a powerful mind, working long and hard on massive amounts of information, is able to see (or recognize in suggestions from others) interesting patterns and new possibilities."⁸ What a terrific opportunity for the information professional to demonstrate leadership. As the requests for information flow in from all corners of the organization, information professionals can make connections with patterns and new possibilities as no one else can make them, because no one else is in a position to put together so many diverse pieces.

In Heller's study of who he considers to be great decision makers, he features innovative people and their sharp ideas. Then he follows with a dumb idea or failure from the same person. Risk is a necessary factor. You can't succeed without taking risks and if your over-

all track record is good enough, your mistakes will be excused.

The new competitive intensity, Kotter says, requires not only risk-taking, but adaptation and attention to the needs of customers. Listening to colleagues who have been downsized to some extent or another, I am sometimes amazed at their reactions and their obvious lack of attention to customer needs. One person talked about some of the services she had to cut out. One in particular, was her pride and joy and she was certain that discontinuing it would bring demands from her clients to reinstate funding and staff to allow continuation of this service. To her dismay, no one seemed to notice or care that the service was gone. Something is missing in such a scenario, and the major element is a service focus.

Korda's attitude is that professionals of any type fall into a routine because anything else would require imagination, invention, and adventure. Kanter talks about incremental innovation. Change and innovation can't be mastered in one step, but a continual striving for higher standards will create a series of small wins that add up to superior performance. Furthermore, consistent superior performance may get you perceived as a leader, if Hersey is right (*The Situational Leader*). Leadership style, he suggests, is how the leader appears in the eyes of others.

Many years ago, when then-President Nixon visited Spain, I was in the crowd lining the sidewalks of Madrid as his motorcade cruised by. The Spaniards were cheering and I felt an immense sense of pride, as an American, as I watched a man who was being welcomed enthusiastically as a world leader. Several years later, I watched the same man climb the steps of a waiting helicopter on the White House lawn, give a firm, determined wave to the crowd and disappear, the first president in our history to resign under duress—not the image of a leader. Yet he was the same man, with the same methods and dreams, even the same wave, that I had hailed as a leader in more positive times. To a large extent, my perception had endowed him with leadership status in Spain and had stripped him of it that somber night in Washington.

Early in Hornstein's book he says, "Organization regeneration requires confrontation of the present in order to open a pathway into the future. It requires questioning the value of established organizational practice."⁹ Or in Drucker's inimitable style, "Some of the greatest impediments to effectiveness are the slogans...the issues of yesterday, which still...confine our vision...."¹⁰ And from Bradford, "The solution that worked yesterday is only slightly appropriate today and will be irrelevant tomorrow."¹¹

In *Change Masters*, her 1983 book, Kanter called her leaders those who know how to take the best of yesterday and carry it into tomorrow. In her latest book, she describes the challenge and frustration of change in terms of the Queen's croquet scene from *Alice In Wonderland*. All of the components on the playing field are alive and constantly in motion. The mallet, played by the flamingo, turns his head just as Alice is ready to hit the ball. He represents technology. So much for strategy! The ball, played by the hedgehog, unrolls and moves to another part of the court at whim, just like employees and customers are inclined to do. The wickets are card soldiers ordered around by the Queen who represents government regulation, corporate raiders, and any other factor that constantly changes the rules.

Change complicates things, isn't easy to deal with, but is inevitable. Ignoring it doesn't solve anything. Will Rogers once said that even if you're on the right track, you'll get run over if you just sit there.

After the Alice analogy, Kanter goes on to say, "The years ahead will be the best of all, however, for those who learn to balance dreams and discipline. The future will belong to those who embrace the potential of wider opportunities but recognize the realities of more constrained resources—and find new solutions that permit doing more with less."¹²

That's us, my friends. We've been finding solutions for doing more with less for quite a while, and according to Jim Matarazzo and Larry Prusak, 164 surveyed managers expect us—the country's special information professionals—to keep doing even more of it. The challenge is to embrace the potential of wider

opportunities; that's where the effort, high energy level, drive for power, and desire to lead come into play.

The goal is to turn challenging opportunities into remarkable successes, chimes in Kouzes and Posner. When successful leaders, studied by the authors, talk about their personal best, it's in circumstances where they have challenged a process, shaken up the organization, and come away proud.

That's what information professionals are out to do—shake up existing realities; but it will take all of the traits of leadership—vision, innovation, creativeness, risk, etc.—to make it happen. In *SuperLeadership*, Marz and Sims caution that imagination is a big factor and a negative imagination can keep people from doing the achievable. You have to purposely choose to form a constructive mental image. Imagine yourself a leader, an innovator, a visionary, and you are halfway to the goal of

making your image real.

Jim Whittaker, the first American to climb Mt. Everest, once said, "You never conquer the mountain. You only conquer yourself." According to Kouzes and Posner, "Because leadership development is ultimately self-development, in the end, the leadership challenge is a personal challenge."¹³ And from Bennis, "At bottom, becoming a leader is synonymous with becoming yourself."¹⁴

Each information professional has the qualifications and resources to lead the profession into the 21st century. The desire is present in all of us. The world needs what we have to offer—whether we have lead the world to realize that yet is another issue. Make a commitment. Create a new image and a new future for yourself. Summon all your energy and commitment and step up to a leadership role. **Make something happen!**

References

- ¹ Gardner, John W. *On Leadership*. Free Press/Macmillan: 1990. p. xii.
- ² *Ibid.*, p. xiii.
- ³ *Ibid.*, p. 3
- ⁴ Kanter, Rosabeth Moss. *When Giants Learn to Dance: Mastering the Challenges of Strategy, Management and Careers in the 1990s*. Simon & Schuster: 1989. p. 17.
- ⁵ Kotter, John P. *The Leadership Factor*. Free Press/Macmillan: 1988. p. 19.
- ⁶ Korda, Michael. *Power! How to Get It, How to Use It*. Random House: 1975. p. 125.
- ⁷ *Ibid.*, p. 128.
- ⁸ Kotter, *op. cit.*, p. 29.
- ⁹ Hornstein, Harvey A. *Managerial Courage: Revitalizing Your Company Without Sacrificing Your Job*. Wiley: 1986. p. 2.
- ¹⁰ Drucker, Peter F. *The New Realities: In Government and Politics/In Economics and Business/In Society and World View*. Harper & Row: 1989. p. x.
- ¹¹ Bradford, David L. and Allan R. Cohen. *Managing for Excellence: The Guide to Developing High Performance in Contemporary Organizations*. Wiley: 1984. p. 12.
- ¹² Kanter, *op. cit.*
- ¹³ Kouzes, James M. and Barry Z. Posner. *The Leadership Challenge: How to Get Extraordinary Things Done in Organizations*. Jossey-Bass: 1987. p. xxi.
- ¹⁴ Bennis, Warren. *On Becoming a Leader*. Addison-Wesley: 1989. p. 9.

Recommended Reading

- Bennis, Warren. *On Becoming a Leader*. Addison-Wesley: 1989—or any of his earlier works.
- Bradford, David L. and Allan R. Cohen. *Managing for Excellence: The Guide to Developing High Performance in Contemporary Organizations*. Wiley: 1984.
- Crosby, Philip B. *Leading: The Art of Becoming An Executive*. McGraw Hill: 1990.
- Crosby, Philip B. *Running Things: The Art of Making Things Happen*. McGraw Hill: 1986.
- Drucker, Peter F. *The New Realities: In Government and Politics/In Economics and Business/In Society and World View*. Harper & Row: 1989—or any of his earlier works.
- Gardner, John W. *On Leadership*. Free Press/Macmillan: 1990.
- Heller, Robert. *The Decision-Makers: The Men and the Million Dollar Moves Behind Today's Great Corporate Success Stories*. Truman Talley/E.P. Dutton: 1989.
- Hersey, Dr. Paul. *The Situational Leader*. Warner: 1984.
- Hornstein, Harvey H. *Managerial Courage: Revitalizing Your Company Without Sacrificing Your Job*. Wiley: 1986.
- Kanter, Rosabeth Moss. *The Change Masters*. Simon & Schuster: 1983.
- Kanter, Rosabeth Moss. *When Giants Learn to Dance: Mastering the Challenges of Strategy, Management and Careers in the 1990s*. Simon & Schuster: 1989.
- Korda, Michael. *Power! How To Get It, How To Use It*. Random House: 1975.
- Kotter, John P. *The Leadership Factor*. Free Press/Macmillan: 1988.
- Kouzes, James M. and Barry Z. Posner. *The Leadership Challenge: How To Get Extraordinary Things Done in Organizations*. Jossey-Bass: 1987.
- Maccoby, Michael. *The Leader: a New Face for American Management*. Simon & Schuster: 1981.
- Martel, Leon. *Mastering Change: The Key to Business Success*. Simon & Schuster: 1986.
- Marz, Charles C. and Henry P. Sims. *SuperLeadership: Leading Others to Lead Themselves*. fwd by Tom Peters. Prentice Hall: 1989.
- Meyer, Michael. *The Alexander Complex: The Dreams That Drive the Great Businessmen*. Times Books: 1989.
- Peters, Tom and Nancy Austin. *A Passion for Excellence: The Leadership Difference*. Random House: 1985.
- Waterman, Robert H., Jr. *The Renewal Factor: How the Best Get and Keep the Competitive Edge*. Bantam: 1987.

Susan S. DiMattia is a business information consultant.

Personal/Career Strategic Plan or Making Things Happen through Self-Leadership

by *Susan S. DiMattia*

At some point in your life, it is vital to take a hard, cold, close look at where and what you are compared to where you thought you would be and what you have always secretly (or not so secretly) dreamed of being or doing.

Many of us muse about the “what ifs” or “if onlys.” Rarely do we tackle the problem in a rational, organized fashion, proactively. How often in your life have you made a conscious decision about a job or career direction? Few of us have a formal life-plan framework against which to measure progress and opportunities. More often, we find a reasonably agreeable job in tolerable surroundings at something above subsistence level salary and stay put, through inertia.

Betty Eddison has suggested, “To be an information leader in your organization, define your objective, target your audiences, define your message, slot your strategy, set your time table, and get to work!”

I’m suggesting that after you’ve done all that planning for your department, do the same thing for yourself. You may discover that you are exactly where you should be and want to be. You may decide that there are several things you could do to enhance your present situation. Or you may conclude, as Muriel Regan suggests, that it is time to move on to an environment where you will have a more positive career path and opportunity for leadership.

The important thing is to make a conscious evaluation of reality.

Time Frame

“I don’t have time,” is not an acceptable excuse. Do you have time to be less than productive and to fall short of the satisfaction you could be feeling for the next several years? You don’t have time to waste on poor information and a lack of goals and objectives.

Allow yourself an hour a day for two days to think about step one of this analysis. The rest of the steps should be spread over no more than a week. Don’t try to complete the exercise in one or two days because things will occur to you over time, as you go through your daily routine with this career planning project on your mind.

Step One—Background

Get a brand new, fairly large note pad. You might prefer to use a PC, but having the flexibility of carrying a pad in order to register random thoughts as they occur is useful in this exercise.

Take a hard look at where you are professionally. Is it where you had hoped to be when you thought about your goals ten years ago? What are your current goals and how have they changed over the past ten years? Why have they changed, and do you honestly think they are stronger or weaker now?

Do you ever (frequently, or only very rarely) look at someone else with envy? Is it because

they have a better title, bigger office, more people reporting to them, higher salary, etc.? Try to keep your observations professional in scope. Look at people outside your own organization. Perhaps someone in a similar organization does basically the same things you do but has a stronger title, is in a more advantageous spot on the organization chart, or is on a higher pay scale than you are.

Be sure to write down any thoughts that occur to you as you concentrate on your current reality and compare it to where you want to be, or to where other people are.

Try to describe, in two or three sentences, what your overall, long term goal is. You may find that you have more than one goal, but keep as focused as possible. Your primary concern may be with security (financial or job); position (a specific title, affiliation with a particular organization, etc.), income level, geographic location, or a combination of factors.

Remember, every thought, feeling, or impression recorded is private, for your eyes only. It will not be critiqued, unless you choose to show it to someone else for comment. Be totally honest, but do it in writing.

Step Two—Strengths and Weaknesses

Label the top of a blank page in columns:

- Strength
- Impact on Performance (Hi—0—Low)
- Situational? If so, how?
- Steps necessary to improve, alter, maintain this strength

In similar fashion, at the top of another blank page, your headings should read:

- Weakness
- Impact on Performance (Hi—0—Low)
- Situational? If so, how?
- Steps necessary to strengthen this weakness

This may be the most difficult part of the whole exercise. If you are particularly hard on yourself, you may have a much longer list of

weaknesses than strengths. The second column on each page should put everything in perspective by indicating whether the trait has a significant positive or negative impact on your current job performance.

The third column specifies any situation in which a strength or weakness is of greater or less proportion than normal. Under “weaknesses” for example, you might say that you hate giving presentations to large groups. In column three, you may be in a position to say that if the presentation is in an office, with only two or three people in attendance, you are less intimidated than if you are in a conference room with 12 people around a large table. You then use this insight to help yourself transfer some of your preparations and feelings in the smaller setting to being more successful in the larger setting.

Include in the lists of strengths and weaknesses personal traits as well as professional capabilities (disorganized, good sense of humor, whiz at online searching, hate to catalog, etc.)

After creating what you believe to be a complete and accurate picture of your traits and capabilities, ask a few friends/colleagues to prepare their own list of impressions about you, without seeing your list. Compare the results and be brutally honest about your perceptions of yourself as compared to an outsider’s view of you.

Step Three—Environment

In this step, you will look at all the factors that make up, and have an impact on, your environment and which may have bearing on your career options. Label a separate page with each of the following headings: finances, family, job, organization, professional involvement/education, mentors, competition.

Finances: List here all of your sources of income, including your bank accounts and investments. Indicate whether they are under your control or whether others have primary or secondary claim to all of the funds. Consider spouse, major creditors, etc. This section will help you decide how great a risk you can

undertake in your decision making.

Family: Are you married? Are children still a factor? How stable is your spouse's or companion's job situation? If he or she has established a professional practice or business, you may be tied to your present region for the next 30 or more years, or be faced with a commuting relationship. How do you feel about these possibilities? Is anyone involved in continuing education (part-time MBA for example) which would be a factor if you decided to move? Do you have good daycare, household help, or other assistance which might be difficult to replace? Is eldercare a factor?

Job: Do you like it? Is there opportunity for advancement or is it dead end? How would you rate the pay and benefits package? Do you anticipate your job or department being phased out, moved, or in some other way altered in the foreseeable future? Is your job's placement on the organization chart satisfactory? If not, what are the prospects for a change? How are you perceived by management and fellow workers?

Organization: Is it in a growing, declining, or stable industry? Does it provide a service that is still in demand? Is it a candidate for takeover/merger?

Professional Involvement/Education: Does your employer support professional and continuing education activities? Have you taken advantage of the opportunities available to you and, if not, why not? Are you in an area of the country where there are few opportunities. How important is that to you?

Mentors: Who, in your organization or through professional or social contacts, could you call on for help, advice, opportunities?

Competition: Is there someone on your staff who wants your job, or who is apt to compete with you for the only available advancement slot? Has your organization started to contract (privatize) many services and functions? Could your area be the next to go that route?

Depending on your personal situation, you may want to add other factors which have a strong impact on your freedom to move, your need for job security, etc. If your hobby is a

boat, a horse, or antique cars, you wouldn't want to move to a large city where housing the hobby is prohibitively expensive or where facilities are so far away that you'd get there too infrequently to make it worth maintaining.

Step Four—Options

Another sheet(s) of paper should list, in any order in which you think of them, any and all options that appeal to you.

- Option
- Pros/Cons
- Risk Factor (1-10)

List them all, no matter how wild they may seem. One may be something you have dreamed of since you were ten years old. Some may seem very far-fetched at present, but might not be so wild if circumstances change some degree in the future. If you've always wanted to be the first information professional in space but don't have any science background, are not in good physical condition, and are realistically at an age where to go back and pick up the necessary pieces would not be feasible, you might not want to bother listing "astronaut training" as an option. You could list "work for NASA" as a viable option in its place.

Indicate the pros and cons for each option. Refer back to your strengths and weaknesses lists and to your environment analysis. Base your pro and con designations for each option on the factors you determined earlier in this exercise. Use all of the space you need to be as thorough and realistic as possible, because this is the heart of the entire exercise.

Assign a one-to-ten risk factor to each option, with ten being the highest risk. This will be arbitrary and unscientific, but how you perceive the risk is just as valid as actual risk when it comes to your decision-making.

Don't move on to the next step until you have had several opportunities to re-read, revise, and expand on all the options you want to consider.

Step Five—Selection

Select the one option that seems most acceptable to you. Write down specific reasons why you selected it. If one major reason is because the risk factor is lowest, but a nagging voice inside your head is saying, “but I’m not wild about doing it,” do yourself and the rest of the world a big favor and **make another selection**. Remember, many writers have specified that leaders are those who are willing to take risks.

Step Six—Action Plan

You may discover that it will take a progression of options in order to reach your goal. List them in the order in which they should be addressed.

Create an action plan. Be very specific, objective by objective. How will you reach your one year goal and your five year goal? Be sure your actions are in the right order. List what you will do and who else will be involved. Describe their role as thoroughly as possible, especially if you have to enlist their support or cooperation to complete the objective. Be sure to include time estimates for each segment of the plan, including a starting date and a completion date. You could prepare a time line, or use a simple chart:

- Objective
- Required Steps
- Others Involved (Describe on separate sheet for each)
- Start
- Completion Date

You may feel you are over-planning. However, this is the spot at which most planning exercises fall apart—the implementation stage. If you take a few hours now to specify a game plan, you have a much greater chance of sticking to the steps in order and in a timely fashion.

Step Seven—Evaluation

Evaluate your progress every three months. Put it on your calendar and spend two quiet hours reviewing each segment of the exercise to see if any major strength, weakness, or environmental factor has changed, and if any additional option has occurred to you or now seems more attractive.

Try not to change your mind or direction unless there is a compelling reason to do so. None of these decisions are irrevocable, but why waste time heading in the wrong direction, or backtracking two or three times? Try to make solid decisions the first time around.

If nothing major has changed in steps one through five, look at your action plan. Have you done all you said you would in three months?

If not, why not? Are you lacking motivation or were your expectations unrealistic? Did unexpected factors or people come into play? Revise your action plan, based on current realities, but *not* on reduced expectations.

Don’t sell yourself short or give up too easily. Grab every available opportunity and stretch it, and you, to maximum potential. In short, be a leader. Make something happen—for you.

Good luck! If this exercise works for you, let me know as you progress toward your goal. If it doesn’t work, go back to step one and try again. ■

Favorite Readings of Some SLA Leaders

by Susan S. DiMattia

A casual survey of the professional reading preferences of several SLA leaders netted an interesting potpourri. It is included here as an incentive for each of you to create your own list of personally significant titles or sources of inspiration or rejuvenation.

Betty Eddison, chair, Library Management Division, is high on anything Warren Bennis writes, particularly his latest book, *On Becoming a Leader* (Addison-Wesley, 1989). She also draws our attention to a compilation of papers given at a Rutgers symposium on leadership in 1988. Speakers were Joanne Euster, Alice Gertzog, Robert Wedgeworth, and Emily Mobley. Their papers are compiled in *Leadership in the Library/Information Profession*, Alice Gertzog, ed. (McFarland, 1989).

William Fisher, candidate for SLA president-elect, and chair, the Association's Professional Development Committee, is a fan of Warren Bennis and also Herb White on leadership. Bill cited an article by Seth Allcorn in *Personnel* magazine for April 1988, "Leadership Styles: A Psychological Picture." Allcorn stresses that leaders have to be motivators and have a high level of self-esteem.

Kaycee Hale, candidate for director and immediate past chair of the Library Management Division, has a long list of publications she uses in her speeches and workshops. Most recently she has quoted from a newsletter called *The 21st-Century Manager: Tomorrow's Management Strategies Today*.

The September 1989 issue included a list of "16 Critical Job Skills for the 21st Century." Of the 16, Kaycee ranked her top priorities as creative thinking, organizational effectiveness, interpersonal skills, and speaking. The list as reported also includes, knowing how to learn, reading, mathematics, writing, listening, problem-solving, and self-esteem. The list is taken from "Workplace Basics: The Skills Employers Want," a report of the American Society for Training and Development.

Kaycee's other valued titles include *Risking*, Dr. David Viscalt (Pocket Books, 1977); Letitia Baldrige's *Complete Guide to Executive Manners* (Rawson Assoc., 1985); *What It Takes*, Lee Gardenswartz and Anita Row (Doubleday, 1987); *The Organized Executive*, Stephanie Winston (Warner Books, 1985); *Success Is the Quality of Your Journey*, written and published by Jennifer James, 1983; and *The Service Edge*, Ron Zemke (NAL Books/Penguin, 1989).

Susan Hill: Whenever Susan is looking for inspiration and insight, she turns to her file of Herb White articles and to his book, *Managing the Special Library* (Special Libraries Association, 1984). She also reads Peter Drucker and Tom Peters' *Passion for Excellence* (Random House, 1985). Susan is a candidate for director and a past-president of the Washington DC Chapter.

Emily Mobley, a past-president, is an inveterate reader when her busy schedule allows.

Her current choices are *Purpose Driven Organizations*, Perry Pascarella and Mark Frohman (Jossey-Bass, 1989) and *Charismatic Leader: Behind the Mystique of Exceptional Leadership*, Jay Conger (Jossey-Bass, 1989).

Jeanette Privat, past-chair of the Library Management Division, says she is looking at the issue of service a lot these days—not at getting customers, but keeping them. For that reason, *Moments of Truth* (Jan Carlzon, Ballinger, 1989) was meaningful. Jeanette credits *How To Be Your Own Best Friend*, by Mildred Newman (Random House, 1970), with keeping her from getting down on herself and being ineffective. She says especially in small libraries we need to give ourselves credit and an occasional pat on the back.

Guy St. Clair, candidate for SLA president-elect and current president of the New York Chapter, calls Robert Hauptman's *Ethical Challenges in Librarianship* (Oryx Press, 1988) the most important book about our profession since he has been in the profession. He also finds anything Herb White writes stimulating, although he doesn't always agree with him. Because he is an entrepreneur, Guy reads *Inc.* magazine regularly, and quotes from it frequently. He also finds Owen Ed-

wards' "Office Politics" column in *GQ* a source of useful ideas.

Frank Spaulding, a past-president of SLA, reads historical fiction for pleasure. On the professional level, he says it is necessary to keep reading other people's thinking in order to clarify your own thinking. He believes that people who say they don't have time to read are doing themselves a disservice. He was impressed with Harlan Cleveland's *Knowledge Executive* (Dutton, 1985). Recently, Frank has found *Information Specialist as Team Player in the Research Process*, J. M. Neway (Greenwood, 1985) and *Stereotypes and Status*, Pauline Wilson (Greenwood, 1982) to be particularly pertinent.

Ann Talcott, currently a director on the SLA Board, and past-chair of the Library Management Division, says that Herb White has made an enormous impact on the way she manages. Tom Peters, in *Passion for Excellence* (Random House, 1985) addresses service area issues vital to today. Ann finds that she does more reading in periodicals than books, particularly the *Harvard Business Review* and *Sloan Management Review*, where there is always something to think about, talk about, copy, and quote. ■

On the Scene

Joint Conference in New Zealand: An Experience to Treasure

by Sara A. Hook-Shelton

The November/December 1988 issue of the *MLA News* included a call for papers for the Joint Conference, Health Library Sections, Australian Library and Information Association and New Zealand Library Association, to take place in Auckland, New Zealand, November 12-16, 1989. Intrigued by the possibility of traveling to an unusual and distant country, I submitted an abstract describing the Indiana University School of Dentistry (IUSD) Library's efforts to offer a computer literacy program to faculty and students. Early in January 1989, I was informed that my paper had been accepted.

The year slipped by quickly. Before I knew it, I was in the Indianapolis International Airport waiting to begin a journey to another hemisphere. Reality set in four hours later in Los Angeles. A flight was announced that would stop *first* in Tahiti, then continue to Auckland; I suddenly realized how far I was going.

Twelve hours is a long time when you are trapped at an altitude of 37,000 feet. The flight included both breakfast and dinner, but I couldn't eat. Two movies were shown, so I didn't sleep either. Almost every seat on the plane was occupied; it was cramped and crowded, and several people spent the flight wandering through the aisles. It was a relief to be on the ground again.

No matter where I go, the first person I meet is a librarian. This trip was no exception. After I had hurled myself and my bags onto the hotel

shuttle bus, I noticed the woman next to me had a canvas tote bag filled with transparencies. It begged the question, "Are you a librarian?" She was Pat Cunniffe from the New Zealand Disabilities Information Bureau. Pat looked after me during the conference, and I must confess that I was grateful for her friendship and concern. My journey had taken close to 20 hours. Although I had left on a Friday evening, it was now Sunday morning, thanks to having crossed the International Date Line.

I had hardly unpacked before I was compelled to join the flurry of activity that is part of a conference. An organizational meeting for speakers took place that afternoon, followed by a welcome reception for all attendees in the evening. By then, exhaustion prevailed. I had gone almost 36 hours without food or sleep.

There were so many substantive and well-prepared presentations at the Joint Conference that it is difficult to choose which to highlight. The agenda was full and provided us with a wealth of topics. The audience was receptive to my presentation and our particular session went smoothly, thanks to careful preparation and strict observation of time limits by our moderator, Anna Kulik Beltowski, Philson Library, University of Auckland. Our session was scheduled on the first day of the program; we were happy to have it out of the way so early in the conference.

In a session on informatics, Chris Campbell, New Zealand Department of Health, described the New Zealand Health Sciences

Network. He forcefully defended the need to integrate information on health care as a vital service to both medical practitioner and patient. It is a difficult time for the New Zealand Health Sciences Network, as the Department of Health is "restructuring." I heard this word often—it is akin to "downsizing" in the United States. No matter what they call it, the process means uncertainty for libraries. Jan Hausman, New Zealand Department of Education, offered an overview of her efforts to bring computer literacy to nurses. A survey was conducted to show the level of competency nurses have with computers. Based on this survey, Jan developed teaching packages to support computer literacy at nursing schools in New Zealand. Finally, a presentation by Dr. Stephen Wealthall, University of Auckland School of Medicine, described his institution's efforts to add computer literacy to the medical school curriculum.

Another interesting presentation which described specific applications of computers in libraries was given by Suzanne Mobbs, Garvan Information Centre, University of New South Wales. She displayed her library's HyperCard program. Called GarLic, this program was organized into four main stacks: Books, Journals, Ref (for personal files of research staff), and Personnel. When a researcher wants to access the GarLic system, she clicks her mouse on its icon, a clove of garlic!

One particularly pertinent session was devoted to management issues. Rowena Cullen, University of Otago Library, gave an in-depth presentation on decision support systems and the importance of adequate management information. This presentation was complemented by Monica Davis, who outlined the process of corporate planning that had taken place at the Biomedical Library, University of New South Wales. The commitment of these two speakers to the process of strategic planning was evident. In contrast, Ian R. Stubbin, New South Wales Health Department Library, Sydney, gave a humorous account of his attempts to provide services within an ever-changing governmental structure. His second presentation was more serious, as he examined

the literature of health promotion. Health promotion is a difficult concept to define, as he illustrated through searches on related terms in ERIC and MEDLINE.

Several presentations discussed efforts in New Zealand and Australia to offer health care information to the general public. Pat Cunniffe outlined the dire need for information that exists among the disabled in her country. She challenged librarians in all types of institutions to help her. Jill Harris, Victoria University of Wellington, had conducted a survey to determine whether New Zealanders want more health information. Her research suggests that although patients receive most of their information from physicians, nurses, and even friends and relatives, it is often either inadequate, frightening, or not easily understood by the lay public. Finally, Moira Bryant discussed Health Link, a consumer health information center at Westmead Hospital, Sydney. Demand for information from Health Link has been steadily increasing over the past four years. Specific information requests mirror attention given to diseases and health issues by the media. A large percentage of hospital staff use Health Link.

Auckland is a spectacular city and I was fortunate to see some of it while I was there. Our group took a short bus tour that gave us an excellent overview of the area. Our driver guided us through lovely suburban areas, past quaint houses and yards filled with lush vegetation. He took us by shopping areas and around downtown Auckland. Most memorable of all, our bus made a slow but steady climb to the top of a volcano which had been inactive for centuries. The view was magnificent; we could see both the Pacific Ocean and the Tasman Sea. But the most notable sight were the cows grazing in the vast expanse of the volcano's crater.

On our tour, we also visited the largest rose garden I had ever seen. Row after row of blooms offered a riot of pink, white, yellow, and red. It was spring in New Zealand. We stopped at an underwater aquarium, where sharks and rays swam both around and above us. Our tour ended with a ferryboat ride across the bay to Devenport. I viewed the unsubstan-

tial wooden boat docked at the harbor with some skepticism. It was cold and the water looked menacing. But then a much larger, more seaworthy vessel pulled up beside us and the trip across was pleasant. We had dinner at the Low Flying Duck Cafe in Devenport. My table companions enjoyed the lamb and fish. Conversation was lively between Norval Gibson Smith, Marie Rogers from Repatriation General Hospital, Melbourne, and the "two lovely ladies from Victoria" (Judy Stowelwinder and Beverley Hore, both from Austin Hospital).

I had the opportunity to do a bit more sight-seeing later in the week. One afternoon, I shared a shopping excursion with Shirley Deviesseux, Commonwealth Serum Laboratories, and Bill Freedman, Peter Maccallum Cancer Institute, both from Melbourne. We went to Parnell Road, an area of interesting specialty shops and restaurants. Many of the shops carried goods and handicrafts from New Zealand—hand-knit woolen items, wood carvings and jewelry made from bone and jade. I also went to the Auckland War Memorial Museum. A life-size Maori boat and two houses have been reconstructed within the museum, carved from wood and beautifully painted, providing a vivid glimpse of New Zealand's history.

One of the most memorable events of the meeting was the conference dinner. Served at what was once the governor's mansion, the food and the elegant surroundings helped make the evening festive. A variety of games and a limerick contest contributed to the fun and provided an opportunity to "roast" the

conference convener, Margaret Gibson Smith, Philson Library, who was both exhausted and relieved that her two years of work on the meeting were almost over. An anonymous poet even favored me with a clever limerick about chiefs and Indians.

With the conference over, I was anxious to begin the trip back to the United States. An eight hour flight to Honolulu was followed by a flight of over five hours to Los Angeles, then two hours to Denver, and finally two more hours to Indianapolis. It was after midnight when we landed, in a snowy, cold environment that seemed strange after the lush greenery of New Zealand. I had made it. I had gone, seen, and participated, and now I was home.

I returned to the United States with a new outlook on librarianship, heartened by what I had learned from colleagues thousands of miles away. I was pleased about our library's activities in computer literacy and anticipated how these might eventually be the starting point for a whole range of electronic technologies in support of teaching and learning. Once again, I was ready to face the challenges and embrace the opportunities our profession has to offer.

My thanks to Dr. W. William Gilmore, dean, and Dr. Lawrence I. Goldblatt, associate dean of Academic Affairs, ISUD, for their support of this endeavor. Most importantly, I want to thank the librarians who participated in the Joint Conference with me for their hospitality and collegiality and for sharing their excellent meeting with this Hoosier so far from home. It was an experience I will always treasure. ■

Sara A. Hook-Shelton is head librarian, Indiana University School of Dentistry.

How to Attract Ethnic Minorities to the Profession

by Em Claire Knowles

In September 1988, I was appointed assistant dean of the Graduate School of Library and Information Science at Simmons College. Responsibilities for this office are recruitment, placement, and other student affairs, as well as maintaining a liaison with New England library employers and the school's alumni group. To that role, I believe I bring a librarian of color perspective. I have just begun to understand the full scope of my responsibilities.

Recently, SLA's Affirmative Action Committee and other groups requested me to look at the challenge of seeking talented ethnic librarians in the information profession. Since then, I have become more sensitive to the needs of identifying librarians of color at *all* levels, including entry, middle, and upper levels of management. My observations and analysis emphasize three major points: outreach to attract more talent to the field; network within the field to become aware of more talented ethnic librarians; and develop a commitment to attract more people of color through mentoring in the Special Libraries Association and various other library and information organizations.

A profile of the Simmons College student population reflects the scarcity of ethnic minority librarians. There are approximately 450 students in the Graduate School Program. We have one of the largest student bodies of ALA-accredited library schools. Of the 450, there are 17 ethnic minorities consisting of African

Americans, Hispanics, and Asian Americans. There are no American Indians. The group of minorities makes up approximately four percent of the student population. There are also 31 international students representing 20 different countries. Furthermore, the Association for Library and Information Science Education *Statistical Report* states that minority representation has been weak and continues to be so in the majority of graduate programs.¹ These statistics are similar to those in the William Moen and Kathleen Heim survey that appeared in the November 1988 issue of *American Libraries*.²

The results of the survey reflect not only the statistical breakdown of the graduating population, but are also indicative of who we see in the workforce, which is less than 14 percent minority.³ Other important statistical data reflective of students is that only seven percent of those responding to the Moen and Heim survey are mobile.⁴ If we take this information and apply it to the ethnic minority population, there is an even smaller percentage of librarians of color available for relocation for various positions in library and information science fields.

This places additional pressure "to reach out" to interested ethnic staff, students, and friends of the library by exposing them to the field through meetings and professional publications. The term outreach can be defined as "to reach beyond, to extend to a wider section of the population."⁵ One rich source of out-

reach is through ethnic professional associations. Many ethnic librarians belong to their respective caucuses in the American Library Association, American Indian Library Association, Asian/Pacific Americans Library Association, Chinese American Library Association, and REFORMA: National Association to Promise Library Services to the Spanish-Speaking. Another possibility is to purchase space in the various ethnic library and other education information publications and place announcements of programs and requests. Thirdly, we can advertise to members on mailing lists gathered from the respective membership directories identifying ethnic librarians such as the *Directory of the Black Caucus of the American Library Association*.

Because of my own membership in that Caucus as well as my position at Simmons, I have received numerous requests from headhunters who are seeking ethnic minorities for various positions. Networking within the profession has also proven to be an effective way to identify librarians of color. For example, at a meeting of the Massachusetts Black Librarians' Network, I asked the group for names of recent black librarians to be considered for inclusion in the revision of the Simmons Graduate School's catalog. Following the dissemination of the Network meeting minutes, I received a letter and resume with a photograph. Since then, I have begun keeping a file on ethnic minority librarians with noted expertise and aspirations. Recently, after another presentation, I was given more resumes to add to my file. Further, I have the opportunity to network at my job. One of my office's responsibilities is to maintain the "New England Jobline," a 24-hour telephone service on which professional library job vacancies are recorded. I often receive calls from people requesting names of "qualified" or "competent" librarians ready and waiting for positions. Such positions range from reference to cataloging, to children's services, and from entry level to middle management to directorships. On a recent occasion I was contacted by a law library affirmative action officer who was seeking an ethnic minority to interview for a head of technical services position. As

our discussion progressed, I inquired if there were any ethnic minority librarians or paraprofessionals presently in his library. He was silent, indicating a much larger problem than his immediate concern.

I have been successful in developing a telephone network with several local academic, public, and special library personnel offices. Occasionally I receive the names of students and alumni, but they are seldom ethnic minorities.

In addressing my third point, commitment to diversity in the profession through mentoring, I will refer to examples of what is being done by the library schools, library institutions, and what we as individuals can do. Anyone concerned about our profession must be willing to bring others into the profession regardless of color. We must become mentors.

The University of California-Santa Barbara, University of Delaware, Ohio State University, and Emory University libraries have entry level internships for recent ethnic master of library science graduates. These programs select one or two persons per year, may rotate the interns through various departments, and engage them in various assignments. The REFORMA and University of California-Los Angeles (UCLA) Mentor Program provides one-on-one support to prospective Hispanic librarians.⁶ The Stanford University Libraries middle management level internship for ethnic minorities is another example of a mentorship program. These programs serve as successful models that can be adopted to attract and train ethnic minority people for the profession.

John Richardson, a library and information science professor at UCLA, has conducted a study funded by the Association for Library and Information Science Education. One of his findings was that international students, minorities, and males are usually more likely to drop out of graduate library science programs due to lack of previous library experience. Again, in such cases, the internship and mentoring efforts must be maintained and enhanced to retain ethnic colleagues in the profession.

Another issue we need to acknowledge is

that racism exists within the profession and we must all work towards its elimination. Majority people seldom know what it is like to be the "only one" in a social event or workplace. Insensitivity to such factors can discourage ethnic librarians from entering the profession or even moving up the career ladder. Yet, educated people, such as librarians, have the capability to interact with the most diverse type of individuals. A poem I found inspiring in addressing cultural diversity in the Greater Boston area is by Sara Ting:

Are you greater than the sun that shines on everyone: Black, Brown, Yellow, Red and White. The sun does not discriminate.⁷

Her message is imperative to remember when developing appropriate contacts with people of color.

Lastly, I would like to make a few suggestions: Send requests to ethnic divisions in ALA asking for the names of ethnic librarians who may have served on panels and who have served on their Executive Boards in the past five years; send requests and announcements about pertinent programs addressing diversity to library schools to share with ethnic librarians/ethnic educators and social groups in your respective work environments and local vicinities. Many of these efforts result in finding new librarians of color, and new ideas to attract potential talent to the field.

The 1989 National Library Week theme focused on the librarian. This was an excellent opportunity to invite ethnic minority librarians to speak about their experiences, especially in dominant ethnic and bicultural neighborhoods. Opportunities such as a National Library Week to feature librarians of color who can address resources, services, and future librarians' opportunities, are possible directions to take in future years. If the opportunity arises, create those projects and programs.

Inside your libraries, identify users and staff who might be interested and show promise in the field of library and information science. Many of our users and staff need moral and

financial support to pursue study. We can recommend the completion of a library technician degree or bachelor's degree for eventual entrance to a graduate library and information program. Career planning requires a long-range view.

How often do we hear youngsters say, "I want to be a librarian when I grow up!"? If you don't, you're not alone. One of my colleagues informed me that in a 1987 nationwide study of college freshmen, not one listed librarianship as an occupational goal. Obviously, creative recruiting efforts are necessary for the profession and a larger vision of our field. For example, students, including ethnic minorities whose career aspirations are limited to the popular fields of education, sociology, history, engineering, and a broad spectrum of health sciences, should be encouraged to pursue alternative options in library and information science.

Library and information science is becoming a more diversified field offering skills that can be combined with subject fields. For example, a musician could become a music librarian or computer specialist, history majors might consider archival work, education majors and former teachers are choosing school librarianship, biology and business majors are turning to information consulting, corporate, and special library work. These are just a few career options in the field, but you already know this.

Mentoring defined is "the act of giving advice or guidance."⁸ How are we going to share our expertise with other potential library talent? We need more role models—people of color. Talented librarians of color who enjoy their work can be role models who can convey their personal satisfaction and sense of pride. This is an important point that I share with all library school students.

If we are serious about the commitment to diversity, we also need to look at salaries. Low entry salaries and limited salary ranges can be quite discouraging to ethnic minorities as well as women, who are seeking impressive and challenging careers. Currently, newly-developed facets of the library and information science field are underemphasized. The pro-

fession might attract more talented librarians of all colors if the innovative aspects are encouraged and rewarded with increased salaries.

We need to broaden our base of library contacts to include librarians of color with strong subject and technical expertise. One way is to interact with ethnic librarians in diverse fields and library organizations. We might look for librarians of color who have been active in other library, information, computer, and publishing organizations. The circle of contacts needs to continue to enlarge.

Library administrators at a major academic institution in the Greater Boston Area have begun, for example, to explore the possibility of establishing a library technicians' program at a local community college. The intent is to attract a higher percentage of ethnic minorities to work in libraries. Also, such exposure might encourage some of the students to further their education towards the completion of a bachelor's degree or master of library and information science degree.

Representatives from the Washington, DC, area library schools attended the Association of College Placement Officers meetings to tell them about the future outlook of the field of library and information science. During fall

1988, four other library schools in the North Atlantic States presented their programs for those interested at the Information Industry Association's Conference. Library employers and library schools realized the importance of grooming librarians of color, and librarians of color with expertise to become active in this profession, this organization, and others.

In conclusion, we need to look at these questions:

- How can we reach out to the librarian of color?
- How can we network and include librarians of color in our contacts? and
- How can we strengthen our commitment to diversity?

We cannot cease seeking answers to those questions. We need to implement programs that make the goals a reality. As we approach the 21st century, ethnic minorities are becoming the majority of our American population. They will become the replacement numbers for many professions. Will library and information service be among them? The challenge is ours. ■

References and Notes

- ¹ Association of Library and Information Science Education. *Library and Information Science Education Statistical Report, 1988*. p. 242. See tables pp. 99-127.
- ² Moen, William E. and Kathleen M. Heim. "The Class of 1988: Librarians for the New Millennium," *American Libraries* November 1988. p. 858. Table 1.
- ³ Randall, Anne K. "Minority Recruitment in Librarianship," in Moen, William E. and Kathleen M. Heim, eds. *Librarians for the New Millennium*. Chicago: ALA-OLPR, 1988. pp. 11-25, 34.
- ⁴ *Op. cit.*
- ⁵ "Outreach." *The Random House Dictionary of the English Language and its Abbreviations*. Edited by Stuart Berg Flexner. Second edition, unabridged. New York: Random House, Inc., 1987. p. 1326.
- ⁶ "Report Spells Out Objectives for REFORMA," *American Libraries*, December 1988. p. 1014.
- ⁷ Ting, Sara. *Sun Poem*. Boston: 1985. Poet address: 6 Elliot Place, Jamaica Plain, MA 12130.
- ⁸ "Mentor." *The Random House Dictionary of the English Language and its Abbreviations*. Edited by Stuart Berg Flexner. Second edition,

unabridged. New York, Random House, Inc., 1987. p. 1201.

- ⁹ Office of Library Personnel Resources of the American Library Association, 60 East Huron Street, Chicago, IL 60611, has prepared various recruitment materials to recruit ethnic minorities. Materials are available for a nominal cost.

Note: The Membership Development Office of the Special Libraries Association, 1700 18th St., NW, Washington, DC 20009, has prepared "Starting Out on the Right Foot: An Investigation for Minorities to Embark Upon Careers in Special Libraries and Information Management," a minority recruitment brochure. SLA will supply brochures to those requesting.

Em Claire Knowles is assistant dean, Simmons College, Graduate School of Library and Information Science.

A Technological Assessment of the SLA Membership: Summary Report

by **Tobi A. Brimsek**

Director, Research and Information Resources

Background

In the summer of 1989, SLA undertook a study to assess the use and impact of technology on its membership. The goal of the study was three-fold:

- Determine the current status and impact of specific tools and applications of technology in the workplace;
- Project the short-term requirements of the membership with regard to existing tools and technology; and
- Help plot future directions in the development of tools and applications of technology.

The survey instrument used to conduct the study was developed in spring, 1990. A select group of SLA members were asked to participate in a pretest of the instrument in May and June. Pretest responses resulted in some modifications to the questionnaire. Prior to its dissemination, the questionnaire was also reviewed by the consulting group retained for data tabulation and guidance, Association Research Group of Alexandria, VA.

In mid-August 1989, 10,695 questionnaires were mailed to all members and associate members of SLA. 4,116 responses were received by the deadline date in late September, providing a response rate of 38.48%. In terms

of the geographic segmentation of the participants, the response rates were 37.75% (3,665) from U.S. members; 44.45% (425) from Canadian members and 45% (50) from elsewhere. Only .1% or six did not indicate a geographic location of the facility in which they are employed.

The report that follows summarizes the salient findings of this study. It should be noted that the data reported are the univariate or aggregate data from all respondents. While the data have been tabulated for the geographic segments of the membership, they indicate a basic homogeneity among the membership. Instances in which data for the United States and Canada differ in a statistically significant way will be noted. Detailed tables of all data will be available in the full report of this study. It should be noted that the data from elsewhere spans the globe from Eastern Europe to the Far East to Scandinavia and represents a relatively small number of responses. These data are also presented in the complete tables to be published in the full report.

What is in Use in Libraries and Information Centers?

One of the focal points of the study was the list of 33 applications of technology and tools commonly used in libraries and information centers and their parent organizations.

Table 1**Selected Applications of Technology and Tools Used in Libraries/Information Centers and Parent Organizations**

CD-Rom	Circulation
Computer Conferencing	Current Awareness System
Computer-based Training	Interlibrary Loan
Database Administration Software	Serials Control System
Database Management Software	Serials Routing (only)
Desktop Publishing	Thesaurus Construction
Electronic Mail and Messaging	Shared Cataloging (OCLC, RLIN etc.)
Expert Systems	
Fax	Online Databases:
Hypertext	Internal
Intelligent Gateways (to external sources)	External
Library Automation Applications:	Optical Scanners
Integrated Library System	Optical Digital Disks
Abstracting/Indexing System	Spreadsheet Software
Acquisitions	Statistics Analysis Software
A-V Management Program	Telecommunications Software
Online Catalog	Voice Mail
Online Catalog - Remote Access	Wordprocessing

To provide a global view of those tools and applications of technology currently in use, the following list in rank order is offered:¹

Tool/Technology Application	Percentage of Respondents ² Currently Using Same in Library/Information Center	Tool/Technology Application	Percentage of Respondents ² Currently Using Same in Library/Information Center
Word Processing	88.7	Acquisitions System	23.2*
External Online Database	87.3	Serials (Routing Only)	22.3*
Fax	72.8	Integrated Library System ³	21.2
Telecommunications Software	70.3	Circulation System	20.9*
Internal Online Database	64.2	Current Awareness System	20.7*
Electronic Mail and Messaging	62.5	Online Catalog - Remote Access	20.7*
Database Management Software	60.8	Voice Mail	19.3
Spreadsheet Software	54.1	Statistical Analysis Software	16.8
Database Administration Software	37.5	Abstracting/Indexing System	16.8*
Online Catalog	37.4*	Optical Scanners	9.8
Automated Interlibrary Loan System	34.5*	Computer Conferencing	8.9
Computer-based training	34.4	Thesaurus Construction	8.1*
Automated Shared Cataloging	34.4*	Optical Digital Disk	6.9
CD-ROM	33.0	Hypertext	5.7
Intelligent Gateways to		A-V Management Program	4.8*
External Sources	31.4	Expert Systems	4.0
Desktop Publishing	23.6		

Of the 4,116 respondents only 1.9% or 80 indicated that none of the applications of technology or tools listed in Table 1 are in use in their libraries/information centers. As expected in this dynamic field, this two percent is a very small group of respondents which for one reason or another do not use these particular tools or applications of technology available today.

The usage in most cases could easily be considered slightly higher if the percentages from the category "purchased but not yet implemented"

were added to these figures. In the instance of least impact, external online databases, .5% have purchased but not yet implemented. The greatest impact is a 4.8% response to circulation systems which have been purchased but not yet implemented.

In addition to determining what SLA members have in use in their libraries/information centers, the goal was also to determine future plans. Several questions dealt with this issue. As part of the question related to the tools and technologies listed in Table 1, participants were asked to indicate which of these they are planning to purchase within one year. The most frequent response was CD-ROM with 11.8% of the respondents planning this purchase within one year. The second most cited item planned for purchase within one year was an online catalog (8.9%); the third, circulation system (7.4%); the fourth, online catalog-remote access (7.4%); and the fifth, acquisitions system (6.2%).

It should be noted there are several instances in which the usage of certain tools and applications of technology differ in the United States and Canada by more than 10%. These differences are highlighted below. There is a

15.7% difference in the use of an automated shared cataloging system. 34.4% of the 2,818 U.S. respondents to this question use such systems, while only 18.7% of the 321 Canadian respondents to this question have such usage. Usage of CD-ROM is also more common in the United States (34.5% of 3,567 respondents) than in Canada (20.5% of 419 respondents)

by 14%. Conversely, usage of online catalogs is more common in Canadian libraries and information centers by 13.2%. 49.2% of the 321 Ca-

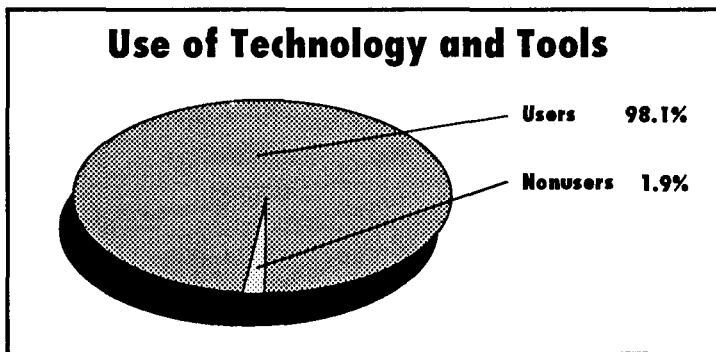


Figure 1

nadian respondents use online catalogs versus 36.0% of their 2,818 U.S. counterparts. Discussion of various hypotheses for these differences may be included in the full report. It is clear these differences could serve as a focal point for additional research.

The Parent Organization

Juxtaposed to the library/information center in the study is the parent organizations' usage of the same tools and applications of technology, excluding the library automation applications. Below is a rank order list of those tools and applications of technology with the parent organization. The total number of respondents to this question is 4,036 and the percentages are based on this aggregate figure.

Interestingly, among the parent organization data, there is only one instance in which Canadian and U.S. usage differs by greater than 10%—voice mail. The difference is actually only 10.8%. The slightly higher usage is in the United States. 29.4% of the 3,567 U.S. respondents indicate such usage within their parent organizations while 18.6% of the 419

Tool/Technology Application	Percentage of Respondents Indicating Using in Parent Organization
Fax	82.1
Wordprocessing	79.2
Spreadsheet Software	71.2
Database Management Software	66.7
Electronic Mail and Messaging	64.5
Telecommunications Software	62.6
Desktop Publishing	60.5
Database Administration Software	56.6
Internal Online Database	53.4
Statistics Analysis Software	53.1
Computer-based Training	51.0

Tool/Technology Application	Percentage of Respondents Indicating Using in Parent Organization
External Online Database	48.7
CD-ROM	31.2
Optical Scanner	30.8
Voice Mail	28.0
Computer Conferencing	25.2
Intelligent Gateways to External Sources	24.8
Expert Systems	23.9
Hypertext	15.9
Optical Digital Disk	14.4

Canadian respondents report voice mail applications in use. For all of the other tools and applications of technology, the U.S. and Canadian parent organization levels of usage are very similar. In fact, for 35% of these tools/technologies, the difference in U.S. versus Canadian usage was reported at less than 1%, illustrating again the homogeneity among the survey participants.

The SLA Member and Technology in the Workplace

SLA members' relationships to technology and tools in the workplace are characterized by some strong and not unexpected responses. 77.8% of the 4,116 respondents describe themselves as primary users of tools and technology, 66.2% implement tools and applications of technology, while 26.3% design tools and technology applications. Occasional users of tools and technology represent 20.6% of the response. (As with all multiple response questions, the data do not tabulate to 100%.) Interestingly, only 2.2% of the respondents selected the description of "non-user of the tools and technology." This statistic is very close to the 1.9% of the respondents who indicated they have none of the tools and technologies listed in Table 1. Of the "non-users," only 6 respondents indicated that they are non-users because they "choose not to use the tools and technology."

Members' Purchasing Power

48.6% of the respondents are responsible for purchase decisions regarding the tools and technology used in their workplaces. 63.9% of the respondents influence purchase decisions and 6.1% are not involved in those decisions. (As with all multiple response questions the data do not tabulate to 100%.)

Staffing

The diversity of the special libraries environment is reflected in the range of staff sizes reported in the study. The number of individuals employed in respondents' libraries/information centers varies widely. It can be noted, however, that almost three-quarters, or 74%, of the respondents report staff sizes of ten or fewer employees in their libraries/information centers. One-person libraries comprise 13.7% of the total response (based on 4036 responses). Libraries/information centers with a staff of two reflect the greatest proportion of respondents at 16.6%. The next most common are those special libraries and information centers staffed by more than 20 people, a group which comprises 14.6% of the response.

Impact of Use of Technology on Staff Size

Participants in the study were asked to as-

sess the impact of the use of technologies/tools on both the staff size and composition for different levels of staff: professionals, technicians, and clericals. The impact on the professional staff is in large part divided between two of the options. 34.2% of the 4,036 respondents indicated that the size and composition remained the same but the responsibilities changed, while 31.5% indicated that the size and composition remained the same. An increase in professional staff was reported by a slight 2.8%. It

should be noted that 15.4% of the respondents could not judge or did not respond.

In reviewing the data for the technicians, a similar response type was evident as in the case of the professional staff. 24.3% indicated a status quo size and composition but change in responsibilities, while 21.9% indicated no change in size and composition. An increase in technicians was reported by 12% of the 4,036 respondents. The group of respondents unable to judge or respond in this category was 38.2%. Clerical staff has been impacted by the use of technology tools in a very slightly different way. 25.6% indicated status quo in size and composition and 24.7% indicated status quo in size and composition with changing responsibilities. An increase in clerical staff was reported by 10.4%, and clerical staff decreases were reported by 7.4% of the respondents. 31.9% selected the cannot judge response or did not respond to this question.

Perceived Impact on Services

An overwhelming 88.9% of the respondents (based on 4,036 responses) felt that the ap-

plications of technology and tools used in their libraries/information centers have served to increase the level of service provided. Technology and tools are a means to assist information professionals in their jobs, not an end in and of themselves. By providing the benefits they do, the applications of technology have expanded the types of services offered in

83.5% of the respondents' workplaces. 64.5% of the respondents have seen increased uses of their facilities while 1.8% report a decreased use of their fa-

ilities. 3.7% of the respondents saw no change in services. Only a small percentage, 5%, could not judge. While these responses reflect percentages of the study participants, it is a clear consensus that the impact on services has been both enhancing and positive.

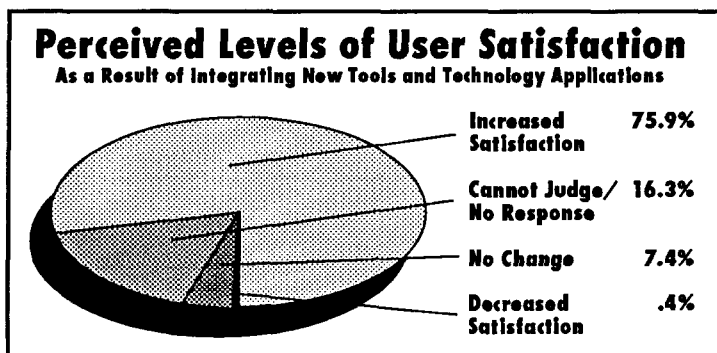


Figure 2

Perceived User Satisfaction

Over three-quarters or 75.9% of the respondents have perceived a greater level of satisfaction among users as a result of integrating new tools and technology applications into their operations. 7.4% of the 4,036 respondents perceived no change in the users' level of satisfaction. Less than 1% or specifically, .4% of the respondents, perceive a decreased level of satisfaction. Those that could not judge or did not respond comprised 16.3% of the participants. The impact of the use of technology is graphically depicted in Figure 2.

It would seem to follow logically that if there are increased levels and expanded types of service, users would enjoy a greater level of satisfaction. While these data are based on the perceptions of the respondents, it would seem

that further investigations focusing on the means of measuring these types of impacts on the user population would be beneficial.

Job Satisfaction

A clear majority of 86.4% of the 4,036 respondents indicated an increased level of job satisfaction as a result of the use of technology in the workplace. Only 1.7% indicated a decrease in the level of job satisfaction. 3.5% could not judge while .8% did not respond. The message appears evident.

Tools and applications of technology are a positive force to be embraced to enhance the role of the information professional and provide greater levels of job satisfaction. The job satisfaction response is graphically depicted in Figure 3.

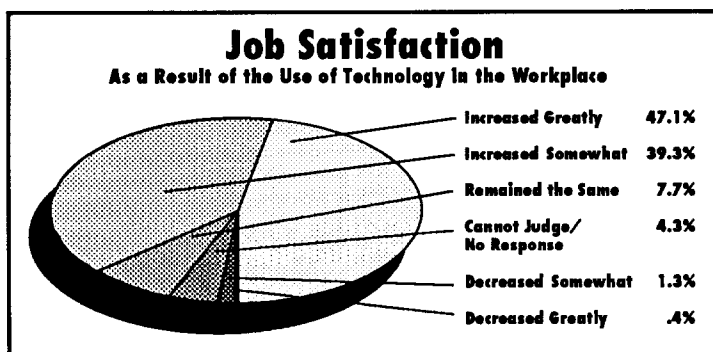


Figure 3

Type of Institution and Business Served

The type of institution or business served by the library/information center was included among the demographic data collected in the study. In Table 2, those institutions/businesses served which represent 4% or greater of

the total number of respondents are listed in rank order.

The following discussion will exemplify the relationship of a particular institution type/business served to the library/information center's use of the tools and applications of technology listed in Table 1 and to relate that usage to the overall usage by the entire base of

respondents. The discussion has been developed to highlight some comparisons rather than to detail each one.

As noted earlier, CD-ROM is currently

being used by 33% of the respondents. Heavier usage among segments of the respondent population was reported: 63.6% of the 685 respondents from academic institutions; 48.1% of the 162 respondents from banking, finance, and real estate and 45.4% of the 293 federal government respondents have indicated current CD-ROM usage. Interestingly, while 11.8% of all the respondents are planning to purchase CD-ROM within one year, 26% of the 173 participants from the hospital/other medical services group indicated such plans. Several other groups exceed the overall average in this plan as well.

Desktop publishing is in use overall by 23.6% of the 4,036 participants. Among the

Table 2

Type of Institution/Business Served As Represented by 4% or Greater of Total Number of Respondents (4,116)

Academic Institution	16.8%	Consulting Services	5.0%
Not-For-Profit Org/Assoc.	7.3%	Engineering	4.8%
Government-Federal	7.2%	Hospital/Other Medical	
Government-Other	5.3%	Services	4.3%
Legal Services	5.2%	Banking, Finance, Real Estate	4.0%

academic institutions group 36.8% of the 685 respondents are currently using desktop publishing. The federal government group indicated a significantly higher usage of electronic mail and messaging than the overall response of 62.5%. Within the federal government environment this tool is used in 77.5% of the libraries and information centers, or by 227 of the 293 respondents in the federal government category.

Fax is used by 88.3% of the 162 respondents from banking, finance and real estate libraries/information centers in comparison with 72.8% of the overall group of respondents. Online catalog-remote access applications are used by 20.7% of the 3,181 respondents. 42.3% of the 473 responding academic institution respondents have such applications in their libraries/information centers.

There are many instances in which interesting data appear in terms of a contrast of a segment of the respondents with the whole base. The examples cited above are to provide some

preliminary data and to indicate the type of data available. Complete data tables for these comparisons will be available in the full report.

Short-term Goals

Some very short-term goals (i.e., plans to purchase within one year) have already been discussed in the context of the tools and applications of technology listed in Table 1. Going beyond that level of immediacy was a more comprehensive question listing tools and applications of technology (as well as leaving blank spaces for items not listed) in order to rank the respondents' top five priorities in terms of their technological agendas for the next five years and what they would like to see implemented in their workplaces. Table 3 below presents top three choices from each of the rankings 1-5.

The tendency to put CD-ROM on the tech-

Table 3
Technological Agendas

Rank	Technology/Tool	Number of Respondents Providing Ranking Data	Percentage and Number
1	CD-ROM	3055	16.0% (489)
1	Integrated Library System	3055	14.8% (452)
1	Online Catalog	3055	8.3% (255)
2	CD-ROM	3048	9.7% (295)
2	Online Catalog	3048	6.4% (194)
2	LAN	3048	6.1% (187)
3	CD-ROM	3034	7.9% (240)
3	Desktop Publishing	3034	5.1% (155)
3	Circulation System	3034	5.0% (153)
4	CD-ROM	3014	6.2% (186)
4	Optical Scanners	3014	5.4% (164)
4	Serial Control System	3014	5.3% (159)
5	CD-ROM	2987	6.2% (185)
5	Desktop Publishing	2987	6.0% (178)
5	Optical Scanners	2987	5.4% (162)

nological agenda is clear. The full report will include a more complete set of ranking tables. As with the usage data, tables reflecting the institution type/business served were produced to review the technological agendas within a demographic parameter. These data are detailed in the full report. As would be expected, within different industries/institution types, some priorities deviate from those of the univariant response.

Planning the Future

An integral part of this technological assessment was the inclusion of a question to elicit some “blue-skying” or “wish list” building from the participants to help plot future directions in the development of tools and applications of technology. 1,065 of the study participants shared their views to this end. The result presented here is the compilation of a list of ten major areas which were approached by several different perspectives. The list is a combination of tools, technology, and concepts that were mentioned most frequently by the respondents. Over one-quarter or 27% of the respondents to this question mention some aspect of CD-ROM—more, less expensive, networked, specific applications, and standards/uniformity are some of the typically cited issues.

Cost/money issues surfaced in 11% (116) of the 1,065 responses. Conceptually, networking, integration, and compatibility among software and hardware together account for 16% of the response. (The total does not add to a 100% response as multiple issues were represented by the same respondent.)

Ten percent of the participants listed full text applications as part of their wish lists for the future. A common theme with full text is the desire for many more of these applications. Nine percent, or 91 individuals made reference to scanning technology—less expensive, more wide-spread applications, etc. At the six percent level of response, three issues surfaced: standardization (both hardware and software); a common command language; the further development of artificial intelligence

applications—e.g., expert systems for use in the special library environment—and increased integration of handling capabilities for images in the tools and applications of technology developed.

A final note should be added for two concepts at their respective three percent and two percent response levels: hypermedia and voice recognition applications. As can be seen, many of the wish lists are extensions of the currently developed and developing technologies. The SLA membership shares these thoughts in an effort to help shape future directions of tools and technology applications to the special library/information community. It seems that the tools and applications of technology on these wish lists address specific information handling issues surfacing now. These information professionals are ready to reach out and integrate these developments into the workplace insofar as they are responsive to their needs and economically feasible in their workplaces.

Conclusion

In conclusion, it must be said that the technological assessment does in fact accomplish the goals described at the beginning of this report. Information has been gathered on the current status and impact of specific tools and applications of technology in the workplace, short-term requirements of the respondents have been described, and visions of the future have been glimpsed in terms of a few major areas.

While the assessment has provided some answers, it also lays the groundwork for more research in this area. There have been some questions posed in this summary report and more are likely to surface in the final analysis. A full report of the results of this study is now available through SLA's Order Department. The full report is entitled: “Powering-Up: A Technological Assessment of the SLA Membership.” Order information and the price may be obtained by contacting the Association office.

■

Notes

- ¹ Because of a problem with the survey instrument, data on automated serials control system are not available.
- ² The number of respondents to the question is 4,036 unless there is an "*" indicated next to percentage. In those cases, the number of respondents is 3,181.
- ³ If participants had an integrated library system, they were requested not to answer for each separate component.

Pittsburgh: An Unparalleled City

THE INFORMATION PROFESSIONAL

SLA
Pittsburgh
June 9-14, 1990

AN UNPARALLELED RESOURCE

June 9-14 marks the 81st Annual Conference of the Special Libraries Association, to take place in Pittsburgh, PA. Over 5,000 information professionals—like you—are expected to attend the hundreds of workshops, education sessions, business meetings, division programs, committee meetings, special events, and—of course—the exhibit hall with over 250 exhibitors. With all those activities, you may never get a chance to see the city or to experience its unique culture.

Pittsburgh, the second largest city in Pennsylvania with a regional population of more than two million people, offers much more than you may think. The city boasts a number of firsts including:

- The First Radio Station: KDKA
- The First Ferris Wheel
- The First All-Aluminum Skyscraper: the Alcoa Building
- The First McDonald's Big Mac burger

In 1985, Pittsburgh was ranked the country's most livable city by Rand McNally. The city combines a number of features few American cities can, including history, recreation, and a revitalized business community.

81st Annual Conference
SPECIAL LIBRARIES
ASSOCIATION

**Getting to
Pittsburgh**

The Greater Pittsburgh International Airport is served by 13 commercial airlines and is a hub for USAir airlines. Cab fair to downtown averages about \$27, airport limousine service is available to major downtown hotels for about \$10 (rates provided by AAA). Railroad service is also available through Amtrack, with its historic Penn Station, conveniently located downtown adjacent to the convention center and hotels. Greyhound also provides a centrally located terminal next to the convention center. For those of you who will be driving into the city, you will find the fastest route to be along the Pennsylvania Turnpike.

A Brief History

Tracing its roots to the mid-1700s and the French and Indian War, Pittsburgh is perhaps the only American city selected personally by George Washington for trade and settlement. Both French and English envisioned the area where the Allegheny and Monongahela rivers meet to form the headwaters of the Ohio as a key trading and access point to the western and northern settlements. In 1758, the British emerged as victors in the struggle for the region and built Ft. Pitt, the largest and most

elaborate outpost in North America at the time.

A town soon began to grow around the fort and it was incorporated in 1816. In the mid-1800s industry began to develop rapidly, particularly glassmaking and ironworks. By 1870, Pittsburgh produced half of the world's glass and iron; and almost all of the world's oil.

The city's prosperity had been a boon to the regional economy, but its industrialization took a toll on the local environment. In the late 1940s, Mayor David Lawrence began the nation's first urban renewal projects. Flood control, air pollution, highway development, and elimination of downtown industrial blight were his goals. A similar project started in the late 1970s, bringing urban renewal that has made Pittsburgh the model city it is today.

After nearly two centuries as a leader in mining and manufacturing, Pittsburgh has been transformed into a major high-technology center which includes a leading role in the fields of education and health care. As the perception of its industrial past fades, the city is cultivating its new image of a sophisticated metropolitan area, housing the third largest concentration of corporate headquarters in the country.

What to Do

Pittsburgh offers a variety of attractions that you may want to explore while in the area. Be sure to pack comfortable shoes, because the city is ideal for walking tours. In addition to a compact downtown area, just 10 blocks, the shops and restaurants at Station Square, as well as the educational attractions in Allegheny Square, are only a bridge crossing away.

Shopping

The Golden Triangle's department stores include Brooks Brothers, Saks 5th Avenue, Kaufmann's, and Horne's, plus dozens of boutiques. Other close-by areas include Shadyside's Walnut Street, South Craig Street

in Oakland, and Forbes Avenue in Squirrel Hill—all lined with specialty shops. Also, the city's historic South Side offers a montage of galleries and antique shops.

Museums and Parks

Point State Park, located in the heart of the Golden Triangle, contains a number of historical attractions including the Ft. Pitt Blockhouse and the Ft. Pitt Museum. The Ft. Pitt Blockhouse is the oldest building in Pittsburgh, while the Ft. Pitt Museum presents the story of the battle between Britain and France. Throughout the city a variety of other museums contain historical materials that provide insight into its heritage. Of note is the 27,000-volume library, archives, and museum at the Historical Society of Western Pennsylvania on Bigelow Boulevard in Oakland, PA.

Other parks and museums of note are Bessemer Court, an outdoor museum featuring a Bessemer converter built in 1930; The Carnegie, 4400 Forbes Avenue, a unique cultural facility in the heart of the university area; and Frick Art Museum, 7227 Reynolds Street, a variety of Renaissance-style displays and buildings.

Other Events and Points of Interest

The annual Three Rivers Arts Festival will take place at Gateway Center, Station Square, Market Square, and Point State Park at the same time as the Annual Conference. The various programs include dance, music, art, crafts, films, videos, theater, and mime. The Festival is one of the most popular events in Pittsburgh, with more than 500,000 visitors expected.

For panoramic views of the city, the Duquesne and Monongahela Inclines offer spectacular sights as they climb nearly 800 feet to the top of Mt. Washington. You can reach the inclines at Station Square or on Carson Street and then visit the Mt. Washington restaurant at the summit. Both inclines are part of the original transportation network in Pittsburgh.

River cruises are operated daily out of Station Square by the Gateway Clipper Fleet. They offer a variety of cruises from two to six hours. One cruise, called the Lock and Dam, gives passengers an opportunity to learn about river navigation. Don't forget, the SLA Fundraising Event scheduled for Monday night will be an evening dinner cruise.

Pittsburgh is also the home to Major League Baseball's Pirates. They will be playing four home games against the New York Mets beginning Thursday June 14th. Contact Three Rivers Stadium for ticket information.

Restaurants and Nightlife

Ethnic identities continue to remain strong in Pittsburgh. Over 100 different ethnic communities make up the neighborhoods that surround the city. They provide the diversity

in restaurants that you may not expect when you think of Pittsburgh.

The same ethnic diversity carries over to nightlife in the city. There is approximately one tavern per 1,000 residents. Bars and nightclubs range in style from the friendly neighborhood watering hole to polished brass and bright lights. If you are looking for live entertainment you will find a number of clubs offering everything from country and western and jazz to the latest rock-and-roll.

If you have not been to Pittsburgh in more than a few years, you will find a diverse, modern, clean, and cultured city. If you always thought Pittsburgh was a little greener than other cities—it is—Pittsburgh has more trees within its city limits than any other city.

See you at the Annual Conference, June 9-14th. For registration information call SLA Headquarters (202)234-4700. ■

Information Policies: Strategies for the Future

By **Sandy Morton**

**Director, Government Relations
and**

Maria Barry

Editor, Serial Publications

The issue of formulating a national information policy for the United States, was discussed in the milestone 1976 report, "National Information Policy," authored by the Domestic Council Committee on the Right of Privacy, chaired by then-vice president Nelson Rockefeller. In May 1989, SLA's 1988/89 President Joe Ann Clifton chaired a strategic meeting on national information policy. Initiatives and high priority areas were identified and discussed by a select group of senior public and private sector leaders in the field of information technology. Participants of the May meeting also resolved there would be two follow-up meetings to further examine information policy issues.

In December 1989, 60 participants from libraries, the information industry, education, government, and the public sector met for two days to continue debate and discussion of the numerous aspects and considerations of national information policy and legislation.

Attendees gathered on the morning of the first day to hear presentations from a panel of experts in the information field.

Toni Carbo Bearman, dean, School of Library and Information Science, University of Pittsburgh, provided an overview and an orientation to the meeting. Because information exchange is now a global issue, any information policy must include both national and international aspects, she stated. Bearman also cautioned participants of the barriers when forming any policy:

- Avoid reducing the issues of information policy to a black and white dichotomy, it will only narrow perspective and rule out possible solutions;
- Avoid dwelling on failed attempts at creating an information policy, it will only stifle creative problem-solving;
- Avoid being impatient, rushing through the planning and thought process will only ruin any feasible solution.

Melvin Day, senior vice president, Herner and Co., presented the audience a review of the Rockefeller Report. To give examples of the Report's thoroughness, Day highlighted two issues which he also considered relevant to the meeting. The Report's extensive coverage of Issue No. 2, "Establish Principles for the Intra-Governmental Transfer of Information which Promote Efficiency and Provide Adequate Safeguards," shows how complex a seemingly simple problem of sharing government information within the Federal Government, for the Government's own use, can be.

The Report's input into Issue No. 5, which reads, "Write Rules to Clarify the Relationship between Government and the Private Sector in the Production, Publication, and Dissemination of Information," shows how carefully its drafters considered the differing interests of the five concerned communities: government, for-profit sector, professional society, pub-

lisher, and the user, Day explained.

The report concludes by calling for a unified approach to policymaking and also states the policymaking process have public visibility at all times. Day urged people to read the entire Report. "While admittedly it does not cover all issues that should be covered, it does a first-rate job with those that it does cover," he said.

Following Day's review, Kathleen Eisenbeis gave a current commentary on the Report.

Eisenbeis, doctoral candidate, Graduate School of Library and Information Science, The University of Texas-Austin, asked her listeners to keep the following considerations in mind when formulating their recommendations:

- The differing contexts of the Rockefeller report and of each individual currently contributing to the process of setting a national information policy.
- Remember how far the information profession has progressed in creating an information policy since the Rockefeller Report (1976).
- Compare the direction information professionals want to take in formulating a policy today as opposed to the direction desired in 1976.

Frank Reeder, chief, Information Policy Branch, Office of Management and Budget, discussed current OMB policies and recent legislative initiatives in the area of information policy. Kenneth Allen, senior vice president, Government Relations, Information Industry Association, provided an overview of the private sector interests in this arena. He presented a number of policies and principles which the IIA believe are essential elements in the creation of an information policy. A complete copy of these principles can be obtained from the director, Government Relations, SLA.

In the afternoon, participants met in six "working groups" and spent the rest of the day putting together recommendations for ad-

ressing the different aspects of a national information policy. They reconvened the second day to present their recommendations. Below is a brief summary of each group's deliberations. Complete texts of speeches and each group's presentations can be obtained from Sandy Morton, director, Government Relations.

Group One: Key Issues

Future information policy must guarantee:

- Broad, equitable dissemination of and access to government information in all formats;
- The greatest possible diversity of public and private sources;
- Protection of basic democratic values such as a free press and individual privacy.

In seeking this policy balance, the government must address a host of key issues; following are only some of the many issues identified by group one.

- Scientific and technical information (STI)
- Privacy
- Public subsidies
- Global Competition
- Information policymaking and implementation
- Local access to government information
- Government management of information

Conclusion:

Rapidly changing technology is creating

new opportunities and new pressures in every area of information policy. It is vital that the information community undertake to create a comprehensive national strategy for information policies in the 1990s, and beyond without delay.

Group Two: Information Resources Management

Some of the principles and policies put forth by the group include:

- Federal agencies must provide information products to meet the needs of American business, industry, academia, government, and the general public.
- The public and private sectors should be partners whenever feasible to improve low cost access to government information.
- Government information policies should stress cooperation between the public sector and the private sector.
- Federal agencies should elevate visibility and stress agency responsibilities for records management.
- Federal documents 30 years or older, with few and precisely delineated exceptions, should be available for scholarly research. Decisions to continue classifications beyond 30 years should be supported by a compelling rationale and agreed upon by both the head of the agency concerned and the U.S. Archivist.
- Federal records management policy should streamline the declassification review of documents in order to increase access to historical material.
- Federal agencies should recognize and support the major role and responsibility

of the Federal libraries and information centers have in the collection, organization, preservation, and dissemination of government information.

Final recommendation:

SLA should lead the establishment of a coalition to crystalize consensus on the principles articulated.

Group Three: Innovation and Productivity Group

Summary of conclusions from group three.

- Innovation would result from the "right" information being available when needed; time spent in locating the required information reduces productivity.
- The founding fathers developed a set of competing interests; these are reflected in the information issues seeking policy resolution.
- Information policies can be reasonable, but an uncoordinated policy can adversely affect innovation and productivity.
- Finding and using information skills will improve productivity (information literacy); technical tools for organizing and getting at information should be available on an equitable basis.
- Information enhances personal productivity and the quality of life; information is essential to the continuation of the historical progress of humanity, to informed choice, and the support of diverse choices.
- Federal agencies should provide to the Superintendent of Documents for distribution to the depository libraries all government publications required by the law to be made available including

government publications in electronic formats.

- The U.S. must strengthen intellectual property protection.
- The Office of Science and Technology Policy is the logical focal point for Executive Branch STI leadership.

A focusing structure for information policy formulation is needed. There must be a permanent staff for any entity responsible for the formulation of information policy.

Group Four: Information Services For Society

Below is a brief summary of the goals and recommendations put forth by group four.
Goals:

- An informed citizenry is the cornerstone of democracy.
- Access to information is needed for:
 - exercising civic duties and responsibilities,
 - maintaining health and welfare,
 - economic security of individuals,
 - national security and international competitiveness,
 - a viable educational system
- Maximize information access by all segments of society
 - John Q. Public - "life" services,
 - professional/occupational groups (doctors, lawyers, scientists, engineers, small businesses)
 - geographic/economic strata (rural/urban; low income)

Recommendations:

Costs of assuring access is a shared responsibility:

- government should take leadership role, find ways to increase collaboration between public and private sectors

Convene groups to create and information bill of rights to include and address:

- diversity of sources
- first amendment protections
- individual privacy
- national security concerns
- non-discrimination of users
- assurance of product quality, accuracy, completeness

Group Five: International Information Exchange

Preamble:

In today's world the international dimension permeates all aspects of national information policies. International aspects must be an integral part of the development of strategies for national information policies and the deliberations of any information policies task force from the beginning. The United States has a special stake in international information issues growing out of our first amendment tradition and practice.

As we enter the nineties, there are several trends and developments that highlight the importance of the international dimension:

- Trade aspects of information exchange are vitally important to the United States, as evidenced by their being negotiated, for the first time, at the current round of GATT talks.
- Issues such as copyright and privacy have taken on increasingly important international dimensions.
- The U.S. information community's influence in the international standards development is under challenge.

Moreover, national information policies development must include not only the international implications of domestic U.S. policies, but also recommendations for international initiatives. We urge that both of these strategies be incorporated from the beginning into

the work of planning groups such as the information policy task forces and the Advisory Committee for the 2nd WHCLIS.

Recommendation:

Create an inter-organizational task force to develop briefing documents and recommend specific actions for creation of this top level group. The Force should include representatives from the following sectors:

- users
- international information companies
- international legal experts
- federal officials with international responsibilities
- academics
- representatives from international programs
- international information policy experts from U.S. organizations
- nonprofit organizations involved in the field

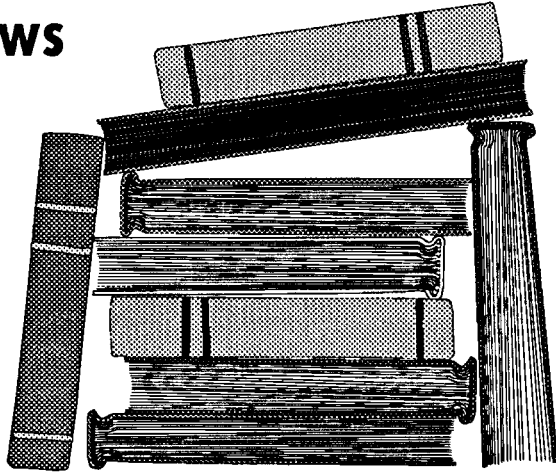
**Group Six:
Future Directions**

Strategies, actions, as well as issues were discussed by this group. Two issues examined were:

- Build and maintain safeguards against controls on access to information: the issues of "sensitive, but unclassified" information and of restrictions to access.
- "Ownership" of information—issues:
 - intellectual property/copyright/
patent
 - government rights in sci/tech information
 - journals-impact of electronic dissemination methods
 - government rights and uncopyrightable information

Results of the December meeting will be used for further discussion and debate at a third meeting which is scheduled to take place at the end of April. For details contact Sandy Morton, director, Government Relations (202) 234-4700. ■

Book Reviews



***Librarians in Search of Science and Identity: The Elusive Profession*, by George E. Bennett, Metuchen, NJ: The Scarecrow Press, 1988, ISBN: 0-81082-075-7. 221 pp.**

As a professional librarian for close to half a century, I found Mr. Bennett's thesis of professional librarians covered a great deal of the public's lack of knowledge of what a librarian does.

Information science in the age of the PCs has caused a revolution in the information profession, comparable to Gutenberg's first use of the printing press. Having started my own information career in 1942, I can appreciate the growth of our field. The author wishes to redefine the profession and spends a chapter of hermeneutics—or in layman's language: interpreting or explaining library science and librarianship. A great deal of this book deals with the late Jesse Shera, who was dean, Case Western Reserve, and a highly influential figure in pioneering information science.

Of great interest for me was Mr. Bennett's study of the stereotype of the librarian as seen from the eyes of the user—from the early 1920s to the present. A great deal of progress has been made towards academic acceptance of the role of the librarian or information scientist, despite the author's view that academic respectability has been missing in the professional lives of academic librarians in the 20th century. I disagree with this premise. Li-

brarianship—public, corporate, and academic—has progressed in every dimension since 1940.

Most of the book deals with the issue that librarianship has struggled with its name for some time. From the 1960s to the present, the identity of librarianship with something called information science has become increasingly popular—so much so that one can easily hyphenate the current identity as library-and-information-science, displacing the older name, library science. The adoption of library-and-information-science, however, has been challenged by some librarians, especially Jesse Shera.

Although I appreciate Mr. Bennett's scholarship and the use of a colloquial dialogue, the entire subject of whether we are called information scientists or librarians, I believe is a tempest in a teapot.

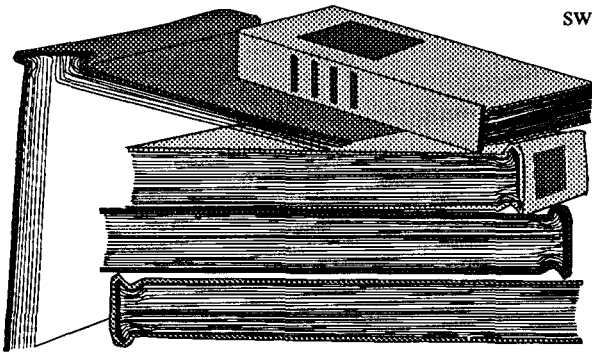
Whether we are called information scientists or librarians, SLA's old motto of putting knowledge to work, is the ultimate cause and need for our services. Whether we utilize PCs or 3x5 card catalogs, the needs of the library user is of prime importance. I do not care whether I am called a librarian or an information scientist, it is the customer who needs information as soon as possible, which is my chief concern. I think most librarians share this belief.

It is not my intention to hurt the author's feelings, as he has indeed applied serious scholarship and research into this project in

defining who we are. But, oh, how boring! Mr. Bennett's book could have been condensed into ten pages. Since I read this work over a period of four or five nights, I found this book to be a definitive cure for insomnia—it beats Sominex. ■

Larry Chasen

Manager, Information Center
General Electric Co., Astro/Space Division
Philadelphia, PA



***Leadership in the Library/Information Profession*, edited by Alice Gertzog. Jefferson, NC: McFarland and Co., 1989, ISBN 0-89950-426-4 (paper). 84 pp.**

This small volume is good proof of the old adage that everyone knows a leader when they see one, but no one can say what makes a leader. The topic is explored on a variety of fronts; by the end of the volume, however, the reader still does not have a good grasp on what leadership in the profession actually is, nor how it might compare with or be different from leadership in other areas of work.

The volume contains the proceedings of the 26th Annual (one day) Symposium of the Graduate Alumni and Faculty of the Rutgers School of Communication, Information and Library Studies, which took place April 8, 1988. After a brief introduction by the editor, four specific papers are presented on the topic of leadership. Joanne R. Euster's paper, "The Qualities of Leadership," is a brief summary of some of the conclusions that appear in her

book, *The Academic Library Director: Management Activities and Effectiveness*, Greenwood, 1987, with additional reflections on the nature of the leader as an organizational visionary. Alice Gertzog's chapter on "Perceptions of Leadership," is also a presentation of work in her recent Rutgers dissertation concerning the ways in which leaders (as identified in her study) in the library profession think about and define leadership. She concludes that the real leaders have good ideas, or vision, and the "institutional positions" from which to transmit those ideas. Unasked and unanswered is whether one can qualify as a leader if she or he has only one of these qualifications.

The two remaining formal presentations, by Robert Wedgeworth and Emily Mobley, are not research based reports but are more in the tone of personal reflections of their own experiences in the profession. Wedgeworth's is a particularly personal statement oriented towards the question of how the profession might nurture leadership. Except for saying that one should always seek mentorship, he never really answers his own question. His advice for being a leader is use common sense while taking uncommon chances. Emily Mobley also takes a predominantly personal approach in her paper, but backs it up with a heavy dose of statistics that show the failure of women and minorities to obtain leadership in the profession. Her statistics showing much greater success of women and minorities in the leadership of SLA than in ALA are certainly intriguing and warrant further study. The remaining sections of the volume contain a partial transcript of the panel and audience discussion, an excellent but brief review by Gertzog of the major concepts about leadership appearing in the general social science literature, and a selected annotated bibliography of that literature.

Throughout the volume the problems of separating leadership from "headship" (or management position), is repeatedly mentioned but never directly addressed as it applies to the library and information manage-

ment professions. While also a major problem with the entire literature on leadership, it is somewhat disappointing that the difference was not covered more adequately here since it is a particular problem in a profession such as ours where women are dominant in numbers but not "headship," and where the profession itself suffers from low social esteem and poor monetary rewards. Even though the volume makes only slight progress toward "answers" on the (very large) problem of leadership in the profession, it is interesting reading and should stimulate increased discussion and, hopefully, increased research on the topic. ■

Robert V. Williams

College of Library and Information Science
University of South Carolina

✓ ***Descriptive Statistical Techniques for Librarians*, by Arthur W. Hafner, Chicago, IL: American Library Association, 1989, ISBN: 0-83890-510-2. 266 pp.**

Most special libraries are required to keep statistical data for management as well as for comparative studies. In this volume the author stresses the need to communicate more effectively with those who use statistical concepts and terminology. Also involved is the use of statistical data in summarizing reports; we all are impressed by the use of numbers in reports, presentations, and correspondence, and the use of graphs forms a very basic method of communication.

This book is intended to serve as a textbook for a first course in research methods for library and information science students. It can also be used to good advantage by administrators, librarians, curators, archivists, resource center technicians, and managers working in information centers

Of specific interest is the author's description of using and misusing statistics. According to Dr. Hafner, there are two forms of statistics. Descriptive statistics is a method for summarizing, organizing, and presenting information. By carefully organizing and sum-

marizing information, descriptive statistics communicates trends and spares the end-user the cumbersome task of looking at each piece of information individually. A good example is the National Weather Service which monitors temperature continuously, while newspapers report only the high and low temperatures of the day. These figures communicate the essence of the information and make it easier to identify warming and cooling trends. Moreover, these figures are more manageable than a long list of the succession of temperatures.

The other class of statistics is inferential statistics. Its methods go beyond information summary. It aims to predict new information and to make broad generalizations from results obtained from limited studies. Although the application of inferential statistics is an interesting topic, this book deals exclusively with descriptive statistics or information summary.

Reading this book is a remarkable learning experience. The author presents each chapter succinctly and at the beginning of each chapter there are learning objectives which involve thinking on the part of the reader. This is not an easy book to merely scan, each page has a definitive message.

The basic theme of this book is the use of statistics in all forms of communications. A knowledge of some mathematical statistics will make it easier for the reader to apply the knowledge well defined by Dr. Hafner. For library applications he surveys utilizing statistical data in:

- Acquisitions
- Circulation and Recall
- Check-Out Date
- Copyright date
- Inventory
- Subscriptions
- Weeding

Dr. Hafner's use of pertinent library illustrations stems from a rich background including a master's in mathematics and a doctorate

in library science. This text does make statistics much easier to understand and use. The text includes over 75 charts and graphs to assist the reader in a better understanding of the subject matter. I particularly liked the author's use of library examples and problems, with solutions completely explained, so the reader does not need to be a statistician to understand. However, this reviewer, not a math whiz, thinks some background in statistical mathematics would be helpful. Dr. Hafner is currently director of the American Medical Association Division of Library and Information Management. He has served on the faculties of the University of Minnesota and Northland College as a professor of mathematics, and most recently as an associate professor of library science at the Chicago College of Osteopathic Medicine.

This book is highly recommended for all of us requiring the application of statistics in library practices. ■

Larry Chasen

Manager, Information Center
General Electric Co., Astro/Space Division
Philadelphia, PA.

***Personnel Needs and Changing Reference Service*, by Rosemarie Riechel. Hamden, CT: The Shoe String Press, 1989, ISBN: 0-208022-260 (cloth). 0-208020-279 (paper). 119 pp.**

In this short volume, the author intends to provide a practical source of information for the improvement of reference services. Her premise for offering such a book is that technology has brought the need for new skills in information retrieval which must be met proactively by the library community. For Reichel, lack of personnel and inadequate financial resources are not acceptable excuses for less than excellent reference service.

Personnel Needs and Changing Reference Service is arranged into four chapters. A bibliography and an index are provided at the end of the volume, although another list of readings is given at the end of chapter one. The text

is easy to read and the author uses lists throughout the book to highlight significant information.

Although the text of *Personnel Needs and Changing Reference Service* is interesting, similar information is probably presented in many other books on library management, online searching, and/or reference. For example, on page 106, the author lists factors such as equipment, subscription cost, vendor training and support, and database coverage that need to be assessed when offering database searching. Similarly, pages 95-6 give the variables that affect the evaluation of reference services: patron characteristics, library size, demographics, etc.

The overall flow of the text is good; the arrangement of chapter two is awkward, however. In this chapter, text is followed by a directory of selected automated systems and services, followed by more text, then a glossary of computer terminology, and finally more text. Both the directory and the glossary could have appeared as separate appendices. This useful information is hidden rather than highlighted when interspersed with text, which is unfortunate.

Chapter three presents 25 actual case studies, which are supposed to show judicious selection of information sources and expertise in reference technique. The reference questions in many of these case studies seemed simplistic; perhaps fewer, more in-depth questions would have been more challenging to the reader. This chapter ends with a list of the sources cited in the case studies. Again, it might have been more helpful to have these in an appendix.

The final chapter in *Personnel Needs and Changing Reference Service* is devoted to evaluating reference services. In this chapter, the author presents many alternatives to judging the effectiveness of services, as well as the difficulties in measuring and analyzing them. This chapter is interesting and useful. Yet there is no conclusion, presented separately or as part of the chapter. The book ends with the statement that evaluation of reference service "is the best defense against obsolescence and poor performance," (page 108). There is no

pulling together of information and thus no sense of closure in the last few paragraphs.

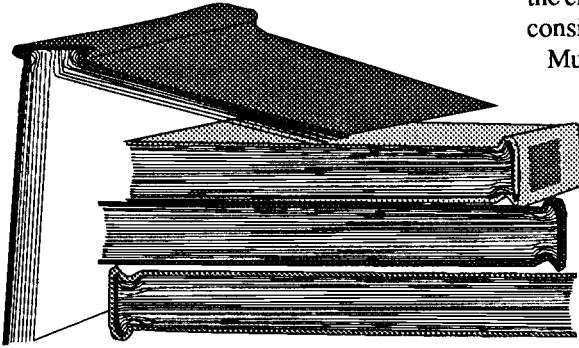
Overall, *Personnel Needs and Changing Reference Service* provides some useful information that is probably duplicated in similar works. Although its intended audience seems to be practicing reference librarians, it is more appropriate for library school students, who are learning about information sources and reference interviewing techniques. Those working in reference and library management already know how important reference skills are to the effective provision of library services. ■

Sara A. Hook-Shelton

Head Librarian

Indiana University School of Dentistry

Indianapolis, IN



***Acquisition Management and Collection Development in Libraries*, by Rose Mary Magrill and John Corbin. Chicago, IL: American Library Association, September 1989, ISBN: 0-9389-0513-7. 256 pp.**

Acquisition Management and Collection Development in Libraries is the second edition of a work first produced in 1984 by Rose Mary Magrill and Doralyn Hickey. Now Magrill and John Corbin have produced a new edition which is updated and expanded. The book "is intended primarily as an overview of the way in which library acquisitions programs are managed, what they try to accomplish, and what methodologies are often used, and the processes through which the collection is

designed, developed, and evaluated." (p. viii)

There are 12 chapters in the work, the first three of which deal with fundamental and theoretical aspects of collection development. Seven chapters are devoted to rather specific functions of acquisitions management. One chapter discusses organization for acquisitions work, including its relationship to collection development generally. A final chapter stresses the importance of evaluation.

Chapters one, two, and three provide an overview of collection development, basic information about the need for and nature of collection development policies, and a comprehensive discussion of how the collection development function is organized and carried out in various types of libraries. Standard definitions are given which differentiate collection development and acquisitions, but, to the credit of the authors, there is no attempt to consider one function superior to the other.

Much attention is given to the environment in which collection development takes place, including consideration of governmental policy, economic conditions, the academic setting, and the publishing universe. The authors demonstrate an excellent understanding of the budgeting aspects of collection development and of all factors involved in allocating funds, analyzing expenditures, etc. The overview of collection development is quite thorough and includes sections on staffing, education, and training. References cited are pertinent and up-to-date, including some dated in 1988 and 1989.

In chapters four, five, and six, Magrill and Corbin review the organization of acquisitions work and the routines of bibliographic searching and acquiring individual items. The information in these areas is basic, with little in the way of new insights. The authors state bibliographic searching "may lack the challenges offered by other library jobs" (p. 99), and this may account for the rather straightforward treatment.

Chapter seven is a concise yet inclusive look at "Vendor-Controlled Order Plans." The historical development of such standing order—

blanket order—approval plans is covered, as well as their advantages, disadvantages, and the management issues they present.

Chapter eight discusses the acquisition routines and problems related to special types of books, e.g., out-of-print, foreign, government publications, technical reports. The section on out-of-print materials is thorough and realistic. Note is also taken of the complexities of acquiring government publications, including the fact that some are never “in print” because all copies are distributed at the time of publication. Bibliographic control and distribution problems for government publications are described.

Format is the basis for discussion in chapters nine and ten. For “Purchasing Nonbook Materials,” the point is made that there are different bibliographic control and acquisition channels for these materials, but the principles of selection are essentially the same as for the traditional print materials. There is a good discussion on selecting and acquiring some of the newer formats, e.g., computer files, software, CD-ROMs. Chapter ten covers the basics of the acquisition serials. The practitioner will appreciate the importance attached to the budgetary impact of serials and the references to many variations in serials procedures.

“Gifts and Exchanges” are covered in chapter eleven. Of particular note here is that one “cooperative exchange program” (Universal Serials and Book Exchange) has become defunct since this book was published.

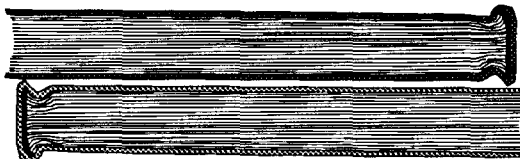
“Evaluation of the Collection” is an appropriate concluding chapter for *Acquisition Management and Collection Development in Libraries*. It deals not only with the methodologies and techniques for evaluating collections and collection use, but also for the evaluation of acquisitions work. “Evaluation should be a recognized part of good management in any type of acquisitions work.” (p. 250) The authors review the classic works on collection evaluation and note their differing emphasis and, at times, differing conclusions.

Magrill and Corbin have provided an excellent overview of acquisitions management and collection development. It is well written,

thorough, up-to-date, has good bibliographies for each area covered, and is indexed. Library school students and practitioners who need to review state-of-the-art practices will find it helpful. ■

Don Lanier

Health Sciences Librarian (Rockford)
and Associate Professor
University of Illinois at Chicago



***E Mail for Libraries*, by Patrick R. Dewey.
Westport, CT: Meckler, 1989, ISBN 0-88736-
327-X. 177 pp.**

While electronic mail services have been available in one form or another for many years, they have become significantly more accessible as a result of the microcomputer revolution. The enormous array of such services currently available can be confusing even to persons well-versed in computers; for those who are just beginning to familiarize themselves with this area, it can be extremely intimidating. In *E Mail for Libraries*, Patrick Dewey has attempted to provide a neophyte’s guide to selecting and using electronic mail services appropriate for library applications.

After an initial summary of the various forms of electronic mail and how they work, Dewey discusses various library applications such as interlibrary loan, networking, reference services, book and document ordering, and broadcasting announcements. In the next three chapters, he discusses several external electronic mail systems such as MCI Mail and CompuServe, together with alternatives such as bulletin board systems, telefacsimile, voice mail, and Telex. Security factors and selection criteria are also discussed. Another chapter is devoted to local area network (LAN) based systems, discussing the basics of how LANs

work, some of the available LAN hardware and software, and how they can be used for electronic mail. Dewey devotes a chapter each to hardware and software considerations. Each of the final five chapters is devoted to one electronic mail system, describing through sample sessions how each system works. DIALMAIL, CompuServe, Delphi, MCI Mail, and generic bulletin boards are the systems discussed. The book closes with several useful appendices: an annotated bibliography, a glossary, and directories of periodicals, software information sources and vendors, and external electronic mail system vendors.

The major weaknesses in this book are in its discussions of hardware and software. Dewey could more clearly distinguish between the two major types of microcomputer systems: the IBM PC-compatible and the Apple Macintosh. A differentiation is especially important in that many peripheral devices (printers, modems, etc.) either are compatible with only one of these systems, or require additional hardware to make them compatible. Similar concerns can be voiced with regard to the chapter on software. Librarians unfamiliar with microcomputers could benefit from Dewey drawing a clearer distinction between the various types of software and their uses. Additionally, in listing sources of information on hardware and software, Dewey fails to include what this reviewer considers to be the most important source: the major microcomputer magazines such as *Byte*, *PC Magazine*, *PC World*, *MacUser*, and *MacWorld*.

It is difficult when writing a book of this sort to address all the significant points. The high speed with which technology changes can make some statements obsolete before the book is even printed. Additionally, it is hard to satisfy all potential readers. Those with some experience with either electronic mail or computer systems in general may be frustrated by Dewey's rudimentary approach, while novices may consider his presentation to be too complex. For the most part, Dewey does an excellent job of presenting the issues involved with electronic mail use in libraries and of discussing those aspects of the technology which are least likely to be affected by change.

***The Information Edge*, by N. Dean Meyer and Mary E. Boone. Homewood, IL: Dow-Jones-Irwin, 1989, ISBN: 155623-279-9. 106 pp.**

New librarians will need to read this book to be convinced of the value of end-user computing, particularly for such common applications as wordprocessing, database searching, electronic mail, and spreadsheets. What librarians may well profit from is the emphasis on, and advice about, quantifying and justifying the benefits of office automation to top management.

Presented largely through a number of case studies from for-profit companies, benefits of end-user computing always seem to be stated in terms of generating hundreds of thousands of dollars (at least) of value added. At times the book closely resembles those resume books in which new college graduates are rapidly transformed into imposing and experienced job applicants by the judicious addition of numbers and appropriate vocabulary.

The overriding point of view is from that of a data processing/management of information department. The only index entry even related to libraries is a cross-reference to external databases. But the problems discussed are very familiar.

And at its core, this title focuses less on technology and numbers, and more on management and communication skills. At the heart of its "strategy tree planning methodology" is a firm commitment to a user-centered problem-solving approach, and recognition of the necessity for building alliances between staff and line functions. Effectiveness, defined in terms of value-added applications that allow people "to do a better job, or to do things they could not do before," (p. 8) is emphasized, rather than the more traditional efficiency measurements of time saved or productivity increased.

The authors provide a useful value-added measurement interview guide, but admit that "in many cases, subjective management judgements will be required to place a dollar value on (value-added) impacts. Even though measurement of value-added benefits is difficult, *it is better to measure significant bene-*

fits roughly than to measure trivia accurately" (italics in the original, p. 360). This is perhaps their most important advice.

I did not find this an easy book to get through. Transferring the case studies to the nonprofit sector seems especially difficult. But the compelling reasons for reading *The Information Edge* are the same as for reading those high-powered resume books. If you need to market your services, you need to reach the people with the power to make decisions, on their terms, and in their language. *The Information Edge* may be very useful in helping you gain that perspective and advantage. ■

Mary Chitty

Associate Librarian
Massachusetts College of Pharmacy and
Allied Health Sciences
Boston, MA

***International Librarianship*, by K.C. Harrison.
Metuchen, NJ: The Scarecrow Press, 1989,
ISBN: 0-8108-2213-X. 194 pp.**

This volume is a collection of 18 papers and addresses relating to the theme of international librarianship given by K.C. Harrison over the years 1975 to 1988. An introductory essay provides the framework for the book, discussing the growth of interest in international librarianship and the need for more international understanding and knowledge in the field. Mr. Harrison, a British public librarian, has had as well, a long, distinguished career consulting to libraries in countries around the world. Indeed, the primary focus of this collection is on international public library development. It is from his worldwide experience, and extensive involvement with international library organizations, that Mr. Harrison draws his material.

In the introductory chapter, Mr. Harrison notes the increasing internationalization and global integration of the world and its meaning for librarians, "In theory, librarianship is one world. Our aim should be to make it so in practice." Librarians, like most other professionals, have gained and have much to gain

from the international exchange of ideas in the development of their field. Mr. Harrison's point is well taken. Certainly, with the development of rapid telecommunications and computerization, information gathering and exchange will increasingly be on the international level. However, the collection of essays which follows the promising introduction falls short of enlightening the reader in a substantive, coordinated manner.

The essays cover a wide range of themes, from several eulogies of individuals to an analysis of the future role of public libraries. A sampling of titles gives the flavor of the book: "Frank Gardner: Internationalist," "Finland Revisited: Solid Lessons from a Remote and Watery Land," "Origins, Development and Tasks of INTAMEL," "From my COMLA Scrapbook," "Adult Education, Literacy and Libraries," "The Development of Book Selection in the UK," "Library and Information Services in Bermuda: A Profile," "Ideal Size for a National Library Service."

Most, though not all, of the entries have been previously published. While individually, many of the essays provide some interesting information on library practices and services abroad, there does not seem to be any coherence to the selection or organization of materials included. A collection organized around major topics under the umbrella of international librarianship would have been more approachable. As it is, historical pieces, papers on individuals, on individual foreign countries, on libraries in the United Kingdom, and on international organizations are to all appearances, randomly ordered.

As a number of the essays were originally speeches, they tend to be chatty in nature rather than informative, lauding individuals and accomplishments, rather than providing in-depth looks at the subject matter. For example, in the essay, "Libraries in the Commonwealth," one's curiosity is engaged by the following: "It is when you come to some of the very small islands... that you find almost insurmountable problems in the way of providing a good library service..." (p. 37) Expecting some enlightenment, all the reader gets is: "But what...do you do with the Turks and

Caicos Islands...? Well I'll tell you! You send out a young librarian of Westminster City Libraries as a VSO." (p. 37) While such essays have their own charm, the letdown comes from the fact that the forward, written by Lester Asheim, presents the book as potentially, "a superb textbook for a course in the study of library service in other countries." (p. viii) Furthermore, many of the individual essays would have benefitted from additional editing; papers delivered publicly, when subsequently published, do not need to have their introductory remarks included. The actual numbering of paragraphs within a paper or talk is unnecessary and distracting; acronyms should be spelled out in the titles on the table of contents page.

All in all, librarians and library students may find the essays an interesting peek at international librarianship, but as a substantive, organized look at the field, the book falls short of the mark. ■

Mary Nell Bryant
Library of Congress
Washington, DC



***Trends in Urban Library Management*, edited by Mohammed M. Aman and Donald J. Sager. Metuchen, NJ: The Scarecrow Press, 1989, ISBN 0-8108-2245-8. 174 pp.**

This volume contains the proceedings of an Urban Library Institute which took place in October 1988 at the University of Wisconsin-Milwaukee. The Institute brought together middle and senior level administrators, primarily from public libraries, with a few from academic libraries, to review trends affecting urban libraries.

Most of the papers focus on the environment in which urban public libraries operate. They include the opening address on urban public leadership by Henry W. Maier, former mayor of Milwaukee and now a professor in the De-

partment of Urban Affairs, University of Wisconsin-Milwaukee; a discussion of municipal fiscal trends by David R. Reimer, director, Milwaukee's Department of Budget and Management Analysis, and an analysis of population changes in metropolitan Milwaukee by Harold Rose of the University of Wisconsin-Milwaukee. David Shavit, Department of Library and Information Science, Northern Illinois University, covers city politics and urban political trends.

Library management topics include an excellent paper presented by Mary Ellen Jacob and co-authored by Deborah L. Rings, both of OCLC, on strategic planning in urban libraries. The paper reviews the history of formal planning in libraries and discusses three basic planning phases: development, execution, and control. Charles Pounian, Hay Management Consultants, discusses the changing nature of the workforce, technological change and the need for employee retraining, and the changing nature of the employer-employee "contract." Both of these papers transcend the urban public library context and are valuable reading for managers in all libraries.

Hank Epstein, Information Transform Inc., discusses technological trends in information services, and Robert D. Cooper, an architect reflects on current trends in American architecture and urban planning. Cooper's paper is valuable background reading not only for those planning new buildings, but also for anyone interested in public library architecture. Gordon L. McAndrew, educator and consultant, examines the state of urban schools and proposes a two-tier system of high school education. His paper is provocative but somewhat off target in relation to the Institute's theme. In a paper titled "Public Libraries: Keepers of the Printed Word," Rick J. Ashton, Denver Public Library, reflects on the roles of the public library and the humanities in independent learning and exploration, a traditional purpose often overshadowed in today's emphasis on the public library as an information place.

Although the papers, as usually is the case when one brings together a number of speakers or writers, vary in quality, overall they

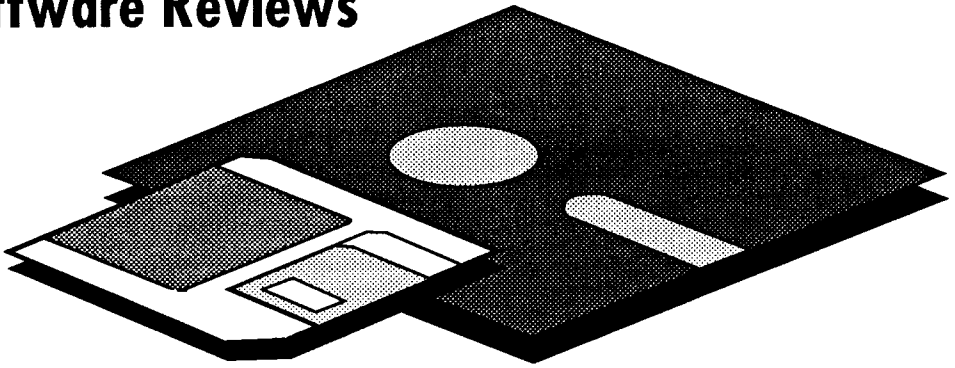
provide a reflective examination of the context in which urban libraries operate. The papers are published in the order they were presented; perhaps arrangement by general topic, and a short introduction would have added to them. Reaction panels and questions followed each speaker, and summaries of these are included with each paper.

While this volume will be of interest primarily to those involved in urban public libraries,

several of the papers, specifically those on strategic planning and human resources management, deserve a wider audience as do the presentations on architecture, urban schools, and public libraries as keepers of the word. ■

Elin B. Christianson
Library/Information Services Consultant
Hobart, IN

Software Reviews



Holdlist. Softwarians, PO Box 451462, Houston, TX. For IBM PC, XT, AT, PS/2, and Compatibles. 3 1/2 or 5 1/4 inch diskettes. \$75.00

With an easy-to-follow user's guide and main menu, anyone can start a serials holdings list for their library. Titles can be added, corrected, or deleted by main menu selection. Separate files can be made for newspapers, journals, magazines, or books. One fault of the software is the lack of adaptability to typing or human error. Capitalization, spacing, and punctuation must be exact to add, correct, or delete a title. To alleviate this problem, a user may (l) look through (not (b) browse, the more common term), a list of titles, if the first word of the title is spelled exactly the same as the titles in the list. Lists can be printed or trans-

ferred to a word processor. When either method is chosen, the titles are alphabetized. ■

Debbie Lemke
Marathon County Public Library
Wausau, WI

RLibrary/Cards. RACHELS, 111 Innsbruck Drive, Clayton, NC, 27520; (919)553-5511. \$139; demo disks are \$5.

RLibrary/Cards is a Macintosh-based card catalog production and printing software package. The user catalogs materials according to the AACR2 rules within the preset windows and text slots. RLibrary/Cards lets

the user construct a master catalog file, print cards and labels, and retain catalog information on diskettes or fixed disks for future use. As with most Macintosh programs, it is window- and mouse-driven, utilizing the popular Macintosh tools.

This reviewer recommends using the program with a hard disk and storing created files on floppy diskettes, thus preventing unnecessary disk switching between drives. The master diskette contains the program and one text folder, occupying a mere 75k of space. RLibrary/Cards was reviewed on a Macintosh SE using an Imagewriter II dot matrix printer. The programmers recommend, and I concur, the user should possess experience using a Macintosh before using RLibrary/Cards.

The program is accompanied by a 55-page manual. The manual includes a tutorial, chapters detailing the many functions and options of the program, six appendices, and an index. Although the manual has a few minor flaws, it is well-written and avoids much of the computer "lingo" irritatingly common in other software documentation.

The tutorial is extremely well-done, allowing the first-time user to catalog a material completely within one setting. This reviewer cataloged an item within 15 minutes of starting the program for the first time. The manual is easy to use throughout. Both the table of contents and the index allow the user to scan the manual with ease; I have only two minor suggestions for improvements. Print the manual on both sides of the page to reduce the manual's size and use a better quality of binding. The plastic-ringed holder now used as binding will allow the pages to be easily torn.

The program's main advantage and selling point is the "user friendly" aspect. Presuming the user has previous Macintosh and AACR2 cataloging experience, using this program is nothing short of a pleasure. Entering information in the pre-chosen slots (title, area of responsibility, subject, call number, notes, publisher, etc.) is simple and quick. All punctuation and location slots are preset. On page seven of the manual it states, "Anyone with

even a little experience in library cataloging will be able to use RLibrary/Cards. A course in library cataloging may help, but is not pre-requisite." I could not disagree more. Cataloging does require either experience or coursework regardless of this claim. This program will, however, make the cataloger's job significantly easier and even a bit fun.

Two nice features of the program are the preview option and the "Choose Phrases" section. The preview option allows cataloging previewing before saving or printing. The "Choose Phrases" section has preset phrases for the statement of responsibility, edition number, and physical description areas. The printing features can be adjusted for the entire card set or specified ranges (main entry, labels, shelf list, etc.). The main disadvantages of the program are the lack of laser printer support, fonts and style choices, and a macro-maker. Also, the Booklist needs a greater size limit than 32k.

I highly recommend this cataloging program tool for small- or medium-sized libraries, and also as an educational tool for library schools and cataloging classes. ■

Douglas F. Hasty

Coy C. Carpenter Library,
Bowman Gray School of Medicine
Wake Forest University
Winston-Salem, NC

Corrections:

In the article "Internationalism of SLA and IFLA 1989," Winter 1990, Anne Galler was incorrectly identified as a United States SLA member. Galler is a Canadian member.

In a review of *United States Government Information Policies: Views and Perspectives*, Winter 1990, the date of the passage of the FOIA was incorrectly printed. The Act was passed in 1967.

We apologize for these errors.

Women's Issues Selections

from

SLA's 1990 Catalog of Publications

These timely publications cover a wide variety of areas within the topic.

New

The American Woman 1990-91: A Status Report

*edited by Sara E. Rix, research director,
Women's Research and Education Institute.*

1990 420 pp.
(softcover) \$10.95

This compilation brings together in a single accessible publication some of the latest research and thinking on the status of American women and their families. Topics include pay equity, child care, affordable housing, minority women, the emergence and growth of women's studies programs, and the Congressional Caucus for Women's Issues in the 101st Congress.

Libraries and Information Centers Within Women's Studies Research Centers

by Grace Jackson-Brown.

1988 34 pp. ISBN 0-87111-333-3
(softcover) \$7.00

The role of libraries and information centers that conduct women's studies research is the focus of this work. As organizations they form a powerful information network that provides institutional resources for research by, for, and about women.

For ordering information or the full catalog contact:



SLA Books, Box SL
1700 Eighteenth Street, NW
Washington, DC 20009
(202)234-4700
FAX (202)265-9317

New

Directory of Selected Research and Policy Centers Working on Women's Issues (Fifth Edition)

compiled by Mary Anne Jorgensen.

1989 48 pp.
(softcover) \$8.50

This new, expanded edition from The Women's Research and Education Institute covers some 47 U.S. centers. The directory lists the primary activities and expertise of each center, as well as its address, phone number, and contact person(s). A table organized by subject area allows users of the directory to see what centers are working on any of over 100 topics. An appendix, which contains additional information about research areas, lists centers with special expertise on minority women.

Re-Entry in the Workforce

1989 34 pp. ISBN 0-87111-333-3
(spiral bound) \$15.00

This information kit has been developed to address the issues of women re-entering the workforce after either a brief or lengthy hiatus; the material brings together relevant material on the topic as well as provides a brief bibliography of books related to re-entry. The reprinted articles, with one exception, are found outside the library literature. This valuable kit offers an array of materials that portrays a broad perspective on re-entry issues.



SPECIAL LIBRARIES ASSOCIATION

Executive Development Academy



An intensive seven day program dedicated to moving upper-level information professionals to the executive level, strengthening executive decision-making abilities and enhancing leadership potential.

Conducted by the faculty from Carnegie Mellon University's Executive Program, the EDA offers participants:

- The intellectual resources of a nationally ranked graduate school of business,
- The opportunity to work closely with internationally recognized researchers and teachers, and
- The most advanced instructional methods.

For additional information contact:

Kathy Warye Hackl
Assistant Executive Director,
Professional Growth
Special Libraries Association
1700 Eighteenth Street, NW
Washington, DC 20009
(202) 234-4700



NewsNet[®]
Eliminates
The Haystack.
Again And
Again.

Your phone's ringing again.

On the other end is a product manager. Or a market analyst. Maybe even your CEO. Someone with an urgent need for the *latest* news on a revolutionary technology. Or a competitor's new product launch. Or a merger in the making.

Your job is to pluck the needle out of the haystack. Now.

NewsNet gives you that power.

NewsNet is the only database that consistently brings you the news you need *before* it's in print. From 11 major newswires and

more than 350 industry-specific newsletters—all with no time embargoes. Which eliminates the time gap that archival databases can leave you hanging in.

You don't have to look for the news, it looks for you.

Only NewsNet has NewsFlash,[™] the electronic clipping service that continuously scans the database, searching for news on just the topics you select. Even when you're off line.

So that every hour of every day, NewsFlash

collects the latest news you need. And delivers the needle from the haystack, right to your PC.

Call us and mention this ad. We'll put you online for a free demonstration. Right now. Right over the phone.

Call toll-free:

1-800-345-1301

Outside the U.S. call: (215) 527-8030



Take The Search Out Of Research[™]
945 Haverford Road, Bryn Mawr, PA 19010

© 1989. NewsNet and NewsFlash[™] are registered service marks of NewsNet, Inc.

**"I keep tabs on
over 200,000 title
listings . . . so you
don't have to.**

"EBSCO's Title Information Department verifies bibliographic and publishing information. We establish titles. We acquire and confirm publishers' prices and ordering restrictions. We conduct research to identify serials published anywhere in the world. As a result, *we make over 100,000 changes to our online bibliographic database every month.*

"We'd like for you to think of us not only as your professional subscription agency, but as professional librarians who make your job as easy as we can."

*Mary Beth Vanderpoorten
MSLS, General Manager
Title Information Department*

At EBSCO, we think *librarians deserve the most complete and accurate bibliographic and pricing information available.* Isn't that what you expect from a professional subscription agency?

EBSCO
SUBSCRIPTION SERVICES

International Headquarters
P.O. Box 1943
Birmingham, AL 35201
(205) 991-6600



Premium Protection for Your Valuable Materials:

The Highsmith Soft-Drop™ Book Cart™

Protection

- Exclusive design features suspended Soft-Drop™ nylon liner that gently catches books "at the top of the drop"
- Rugged nylon liner snaps securely to cart lip, prevents damage and loss of small items

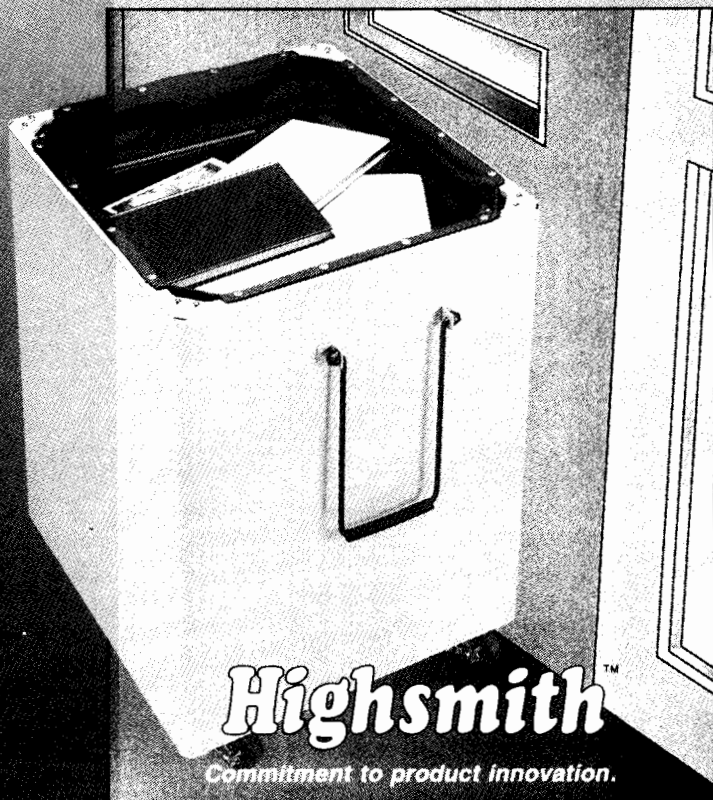
Convenience

- Space-saving suspension system provides up to 50% more capacity than other carts of comparable dimensions
- Steel fold-down handle extends 12" for safe, convenient transport
- 32" height accommodates comfortable return door level

Durability

- Four sturdy 3" casters (2 swivel-lock, 2 fixed) make maneuvering easy
- Zinc-plated 20-gauge steel body with polyethylene finish looks good, stands up to hard use

Protect your materials with the premium book cart.



Highsmith™

Commitment to product innovation.

To order, or for more information and a free copy of the Highsmith Library Catalog, write or call toll-free, 1-800-588-2110.

The Highsmith Co., Inc., Dept. SP, W5527 Hwy. 106, P.O. Box 800, Fort Atkinson, WI 53538-0800.

Outstanding 1990 Titles from Industrial Press

BASIC INDUSTRIAL ELECTRICITY

A Training and Maintenance Manual

KENNETH G. OLIVER

1990, 300 pp., illus., 3006-7, \$32.95

Explains the principles involved in the operation of electrical equipment in an average industrial plant. Offers a "hands on" approach and will enable the maintenance electrician to see how his equipment functions and what is required to maintain it.

COMPUTER GRAPHICS HANDBOOK

MICHAEL E. MORTENSON

1990, 272 pp., illus., 1002-3, \$24.95

This well-written textbook presents and illustrates basic geometric and mathematical principles and concepts which are essential in achieving successful computer graphics applications.

C.N.C.

An Introduction to Machining and Part Programming

DAVID GIBBS and TOM CRANDELL

1990, 320 pp., illus., 3009-1, \$29.95

Offers a practical introduction to numerical control technology and fully explains the most recent developments in machining and programming. Contains a review of basic concepts and principles and covers tooling, workholding, machine setting, speeds and feeds, and part programming before concluding with discussion of advanced techniques.

CAD SYSTEMS IN MECHANICAL AND PRODUCTION ENGINEERING

PETER INGHAM

1990, 180 pp., illus., 3008-3, \$18.95

Using practical examples and illustrations this book explains the application of CAD systems to mechanical and production engineering. All important aspects of CAD are considered including software drafting systems, three-dimensional modelers, finite element analysis packages, and database systems.

A GUIDE TO METAL AND PLASTIC FINISHING

MARION L. MARONEY

1990, 120 pp. (approx.), illus., 3028-8, \$18.95

Compiles information on buffs, abrasives, abrasive belts and wheels, and polishing and buffing compounds. It also includes suggestions as to their usage and methods of usage on metals and plastics.

VIBRATION SPECTRUM ANALYSIS

A Practical Approach

STEVE GOLDMAN

1990, 280 pp. (approx.), illus., 3027-X, \$36.95

Every rotating machine exhibits a unique characteristic. This book teaches the maintenance mechanic or engineer to identify problem areas on critical rotating equipment before extensive damage occurs.

ENGINEERING SCIENCE

WILLIAM BOLTON

1990, 213 pp., illus., 3007-5, \$22.95

This source book will aid students and engineers in developing an understanding of scientific concepts and their applications which are essential to the study of mechanical and production engineering.

MATHEMATICS AT WORK

Third Edition

HOLBROOK HORTON

1990, 190 pp. (approx.), illus., 3029-6, \$19.95

Presents fundamental mathematics including arithmetic, algebra, geometry, trigonometry, and logarithms and provides step-by-step analysis and solutions of a wide variety of problems.

MECHANICAL TECHNOLOGY

D.H. BACON and R.C. STEPHENS

1990, 552 pp., 3003-2, \$29.95

A comprehensive one-volume source which covers stress analysis, dynamics, thermodynamics, and fluid mechanics.

STATISTICAL PROCESS CONTROL

LEONARD A. DOTY

1990, 286 pp., illus., 2000-2, \$34.95

Presents the practices and procedures of statistical process control as a means of controlling quality in the workplace.

TESTING FLUID POWER COMPONENTS

ROBERT A. NASCA

1990, 352 pp. (approx.), 3002-4, \$45.00

Purposeful as an aid to understanding and applying common test procedures for hydraulic and pneumatic components.

TRIBOLOGY IN MACHINE DESIGN

T.A. STOLARSKI

1990, 352 pp., illus., 1102-X, \$59.95

Explains the role of tribology in the design of machine elements and discusses how algorithms can be used in a range of practical applications.

INTERPRETATION OF GEOMETRIC DIMENSIONING AND TOLERANCING

DANIEL E. PUNCOCHAR

1990, 142 pp., illus., 3010-5, \$19.95

Provides students with a full understanding of geometric dimensioning and tolerancing through basic principles and meaningful applications.

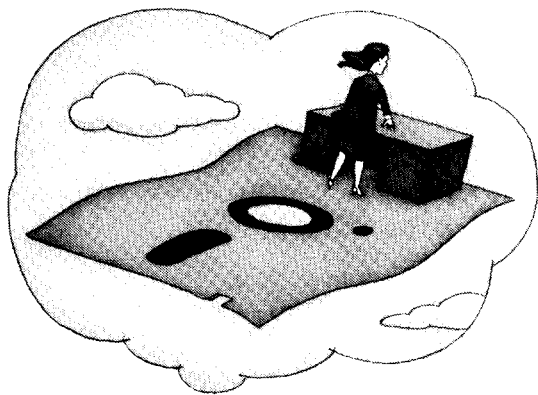
WORLD CLASS MAINTENANCE MANAGEMENT

TERRY WIREMAN

1990, 190 pp. (approx.), illus., 3025-3, \$34.95

Provides a framework of options allowing maintenance decision-makers to select the most successful way for them to manage their maintenance function while minimizing activities and costs.

INDUSTRIAL PRESS INC./DEPT. 9041/200 MADISON AVENUE/NEW YORK, NY 10016



LIBRARY DREAMS

Wouldn't it be great if you had time to deliver more information to more people in your organization? And were also able to meet increased demands on your library without hiring additional staff?

Wouldn't it be great if there were one software package that could automate your entire library . . . and had a quick and easy set-up procedure with all the custom reports you need for complete control of every information resource you have?

INMAGIC software is a dream come true for thousands of librarians worldwide. With its ability to create online catalogs and bibliographies, track serials, acquisitions, loans and more, it's no wonder INMAGIC is the industry's most popular information management software. And there's no programming involved, so you can begin to use it right away.

INMAGIC and its companions the BIBLIO GUIDE and MARC Adaptor were developed by library and computer professionals who understand the needs of librarians, and their dreams.

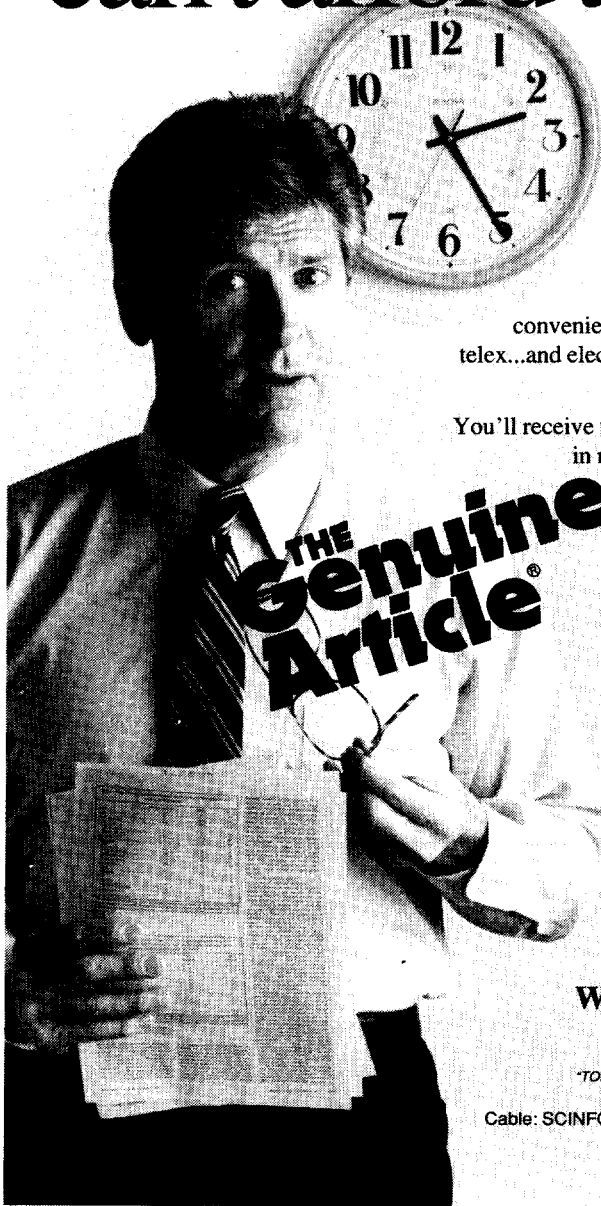
For more information, and the name of an INMAGIC dealer near you, call 617-661-8124. TESTMAGIC, a full-function trial version, is available. Mail us your business card and we'll send you our free planning booklet on automating your library.



Inmagic Inc
2067 Massachusetts Avenue
Cambridge, MA 02140-1338
617-661-8124 · Telex 709543

INMAGIC® is a registered trademark of Inmagic Inc. BIBLIO GUIDE™, MARC Adaptor™ and TESTMAGIC™ are trademarks of Inmagic Inc.

When you just can't afford to wait...



The Genuine Article® delivers the full text of the articles you need. When you need them. On today's hottest topics. From almost 7,000 of the world's leading journals.

Access millions of articles—some dating back to the 1800's!

The Genuine Article provides fast, convenient ordering by mail...fax...telephone...telex...and electronic transmission. Within 48 hours, your articles are on their way to you.

You'll receive the highest quality articles available... in most cases, the original journal pages.

And you can choose a payment option to meet your specific needs.

Get all the documents you need—when you need them—from The Genuine Article.

For more information, call The Genuine Article Account Representative at 1-800-336-4474 or (215) 386-0100, ext. 1483. Or write to the address below.

**THE
Genuine
Article®**

When you need to see it now!

Institute for Scientific Information®
"TODAY'S INFORMATION FOR TOMORROW'S DISCOVERY"
3501 Market Street, Philadelphia, PA 19104
Cable: SCINFO, Telex: 84-5305, Telecopier: (215) 386-6362

S-26-5961

LEADERSHIP DIRECTORIES

CONGRESSIONAL YELLOW BOOK, a quarterly directory of members of Congress, including their committees and key staff aides. \$165 per year. ISSN 0191-1422.

FEDERAL YELLOW BOOK, a quarterly directory of the Federal Departments and Agencies. \$165 per year. ISSN 0145-6202.

STATE YELLOW BOOK, a semi-annual directory of the Executive, Legislative and Judicial branches of 50 state governments. \$135 per year. ISSN 0899-2207.

NEWS MEDIA YELLOW BOOK OF WASHINGTON AND NEW YORK, a semi-annual directory of reporters, columnists, editors and producers in the nation's government and financial capitals. \$135 per year. ISSN 1043-2620.

THE CORPORATE 1000, a quarterly directory of those who manage the leading 1000 listed U.S. companies. \$165 per year. ISSN 0882-3227.

THE FINANCIAL 1000, an annual directory of those who manage the leading 1000 U.S. financial institutions. \$100 per year. ISSN 0894-7627.

THE OVER-THE-COUNTER 1000, an annual directory of those who manage the 1000 younger growth companies. \$100 per year. ISSN 1040-001X.

THE INTERNATIONAL CORPORATE 1000, an annual directory of those who manage the world's leading 1000 corporations. \$100 per year. ISSN 1042-1475.

THE BLUE BOOK OF CANADIAN BUSINESS, an annual directory of basic information on Canadian corporations. \$100 per year. ISSN 0381-7245.

JAPAN COMPANY HANDBOOK, FIRST SECTION, a quarterly guide to Japan's leading corporations listed on the first sections of major Japanese stock exchanges. \$194 per year. ISSN 0288-9307.

JAPAN COMPANY HANDBOOK, SECOND SECTION, a quarterly guide to Japan's leading corporations listed on the second sections of major Japanese stock exchanges. \$190 per year. ISSN 0288-9315.

FACSIMILE USERS' DIRECTORY, an annual directory of key Fax numbers in the U.S., Canada and overseas. \$100 per year. ISSN 1041-3286.



MONITOR PUBLISHING COMPANY
104 Fifth Avenue New York, N.Y. 10011
Tel.: (212) 627-4140
Fax: (212) 645-0931

TEACH ONLINE SEARCHING, WITHOUT ONLINE COSTS!



with STN Mentor™, a series of personal computer tutorials for scientific databases

You know how to search the 80 databases on STN International®. Now STN Mentor lessons will help you teach others. They'll learn in the privacy of their own offices, at their speed, with no risk because they are not really online. It's easy and it's economical.

Choose from these STN Mentor lessons that operate on IBM PC and 100% compatibles:

- STN Overview (FREE)*
- STN Express® Overview (FREE)*
- Spotlight on Authors I
- Introduction to CAS ONLINE*
- Introduction to Chemical Journals Online (CJO)
- Focus on Superconductors
- Focus on Biotechnology
- Focus on Health and Safety
- Focus on Physics
- The CHEMLIST File
- The JICST-E File

*These lessons are now available for certain Macintosh models!

STN Mentor lessons cost \$19.50, (STN Express Overview and STN Overview are free.) Send today for your free information package.

YES! I want to learn more about STN Mentor software for easy searching of scientific databases.

Please send my free package of STN Mentor: STN Overview, for:

IBM (DOS)
 3½ inch

IBM (DOS)
 5¼ inch disks

Macintosh

Name _____

Address _____

Telephone _____

Mail to STN International, c/o Chemical Abstracts Service, Dept. 30590, P.O. Box 3012, Columbus, OH 43210 U.S.A. Phone: (614) 447-3600 or 1-800-848-6538.

STN International is operated in North America by Chemical Abstracts Service, a division of the American Chemical Society.

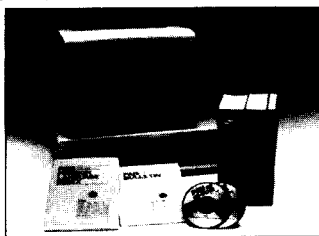




How can you locate crime statistics for Australia?

Next time you face a tough question, next time you need an answer other print and electronic indexes can't provide, start your search where you're bound to find the right answer: PAIS. Only PAIS' acclaimed public/social policy indexes give you:

- Selective coverage of the public/social aspects of business, economics, finance, law and legislation, international trade and relations, public health, and much more.
- Eclectic coverage of literature published around the world in English, French, German, Italian, Portuguese, and Spanish.



- Precise indexing of monographs, periodicals, directories, government documents—in all, nearly 300,000 stringently edited items in the electronic formats and more than one million items in the print indexes.
- A treasure trove of references to hard-to-find statistics, demographics, business trends, and background information.
- The indexing format that meets your needs best: print, online, or CD-ROM.

For more information on

PAIS' family of public/social policy indexes, call today.

PAIS

Public Affairs Information Service, Inc.

521 West 43rd Street • New York, NY 10036-4396 • 800-288-PAIS
212-736-6629 (outside the U.S.)

*In Print: PAIS BULLETIN • PAIS FOREIGN LANGUAGE INDEX • PAIS SUBJECT HEADINGS
Online: PAIS INTERNATIONAL On Compact Disc: PAIS ON CD-ROM*

Dissertation Abstracts

O N D I S C

THE FACT COMPACTOR

ACCESS TO MORE THAN ONE MILLION DISSERTATIONS AND
MASTERS THESES—IN THE PALM OF YOUR HAND

Dissertation Abstracts Ondisc (DAO) enables your patrons to get at critical research information—with *minimum* research assistance.

FACT: A few easy-to-use, virtually indestructible compact discs can lead researchers to over *one million* dissertations and masters theses.

Dissertation Abstracts Ondisc includes 700,000 citations for dissertations published from 1861 through June 1980, and over 300,000 citations *and* abstracts for dissertations published since July 1980. From mid-1988 forward, *DAO* includes British abstracts. Theses are searchable by author, institution, year of degree, title, subject, and now adviser. Subscribers receive updates every six months.

FACT: Researchers get quick results without direct supervision.

DAO starts to work for your patrons the instant they sit down at the workstation.* And because the information is *ondisc*, there are no busy signals, no connect or print charges, no mid-search disconnections, no data transmission errors.

FACT: You can save space, reduce costs, and speed your patrons toward a new level of independent searching.

For more information about *Dissertation Abstracts Ondisc*, return the coupon below or call us toll free at 1-800-521-0600, x780. In Canada, call toll free 1-800-343-5299. In Michigan or Alaska, call collect 313-761-4700.

U·M·I

A Bell & Howell Company
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA

IBM PC XT, AT*, or 100% compatible microcomputer, or IBM PS/2* with a minimum of 640 kb RAM

Please send me the complete *DAO* information packet.

Please have an account representative contact me.

NAME _____

TITLE _____

INSTITUTION _____

ADDRESS _____

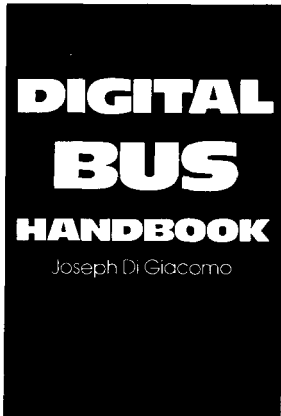
CITY _____ STATE _____ ZIP _____

PHONE () _____

Clip (or copy) this coupon and mail to UMI Dissertation Services, Box 61, 300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA.

SLA

Scientific, Technical, Management and Reference
BOOKS OF ALL PUBLISHERS



New (Spring 1990) Books From
McGraw Hill

Di Giacomo, J., **DIGITAL BUS
HANDBOOK** (0-07-016923-3)

American Water Works Association, **WATER QUALITY AND
TREATMENT: A Handbook of Public Water Supplies**
(0-07-001540-6)

Ginsburg, G. **PRINTED CIRCUIT DESIGN** (0-07-023309-8)

Hillier, F. **INTRODUCTION TO OPERATIONS RESEARCH, 5/E,**
IBM Version (0-07-909758-8); Mac Version (0-07-909759-6)

Jacobson, M. **OPTICAL THIN-FILM DEPOSITION** (0-07-032209-0)

Nakas, J. **BIOTECHNOLOGY OF PLANT-MICROBE INTER-
ACTIONS,** (0-07-045867-7)

Rorabaugh, C. **COMMUNICATIONS FORMULAS AND
ALGORITHMS: For Systems Analysis and Design**
(0-07-053644-9)

Serving
Special Libraries for 27 Years



RESEARCH BOOKS, INC.

38 Academy Street, P.O. Box 1507
Madison, Connecticut 06443
(203) 245-3279 FAX (203) 245-1830

Except from Connecticut call 1-800-445-RELY

EDUCATION FOR LEADERSHIP IN THE 21ST CENTURY

School of Library Service Columbia University

announces an
exciting expanded
MS program that
will emphasize
specializations in:

- Academic and Research Librarianship
- Archives Management and Organization
- Bibliographic Control
- Conservation and Preservation
- **Health Science and Medical Informatics**
- **Information Science and Systems**
- Information Services
- **Law Librarianship**
- Management and Administration
- Public Librarianship
- Rare Books, Special Collections, and Bibliography
- **Special Libraries, Information Centers, Independent Specialties/Consultancies**



In this dynamic new program priority will be given to methods, principles, and specializations, forty-eight credit hours required. Special internships available.

Qualified students may finance studies with scholarship and fellowship grants from the University and other sources, with educational loans, and with part-time or full-time work/study arrangements.

Deadline for scholarship applications: April 1, 1989.

For information about the Master's, Certificate, or Doctoral programs:

School of Library Service
516 Butler Library
Columbia University
New York, New York 10027
212-854-2292

An Equal Opportunity Educator/Employer

SYRACUSE UNIVERSITY SCHOOL OF INFORMATION STUDIES 1990 SUMMER PROFESSIONAL WORKSHOPS & COURSES

- Managing Information Systems Projects, May 14-June 15
- Personal Computers for Information Management, May 14-25
- Online Retrieval Services, May 14-Aug 10
- Management & Design of an Information Based Organization, May 14-June 15
- Online Public Access Catalogs, May 14-25
- Information Planning & Use in National Development, May 28-June 8
- Communicating with Library & Information System Publics, June 11-22
- Curriculum Concerns for Media Specialists, May 14-Aug 10
- History of Recorded Information, July 2-Aug 10
- Reference & Information Services, July 2-Aug 10
- Media for Young Adults, July 9-Aug 10
- Collection Development, July 2-Aug 10
- Motivation In Instructional Design, July 9-27

For more information on summer workshops at Syracuse University, complete the coupon & mail it to Syracuse University, Division of Summer Sessions, Suite 230, 111 Waverly Ave., Syracuse, NY 13244-2320. Or, call (315) 443-4181.

Name _____
Address _____
City _____ State _____
Zip _____ Special

You can have it all.



Others can place your order, but only Faxon provides a complete line of serials acquisition and management services to guide you through every step of your purchasing cycle. Our accurate pricing information facilitates budgeting and planning, while other Faxon services simplify ordering and renewal, speed check-in and claiming, and provide fast, easy access to all the information you need.

Start putting Faxon's comprehensive set of services to work for you.
Call today at 1-800-225-6055. (In MA, call 617-329-3350 collect.)

faxon

28A

special libraries

RESEARCH

...without the
usual speed limits.

Science Citation Index® Compact Disc Edition

1990

Copyright 1989 by
Institute for Scientific
Information, Inc.
Philadelphia, Penn-
sylvania, USA

Made in USA
by PDC

All rights reserved.
This work is published
under the terms of the
International Standard
Book Numbering System
01-102-100000-0

The first time you run the new, enhanced
Science Citation Index® Compact Disc Edition, you'll know
what we mean. It's built for speed.

Speed that translates into instant access to the bibliographic data
from 3300 sci-tech journals. The journals you depend on to keep
your research going full speed ahead.

But the CD Edition does more than go faster—it goes farther. An
exclusive hypertext feature called *related records* leads you to other
records having references in common with the ones you've already
retrieved ... expanding your search with a few simple keystrokes.

And even though Laserdisk
Professional magazine named
the *SCI® CD Edition* "Product
of the Year" in 1988, we went
back and made it better. Now
on a single disc, it's easier than
ever to use.

Call us toll-free at.....
**800-336-4474, operator
R301**, or complete and mail
the coupon, to reserve your
free trial copy today.



Science Citation Index® Compact Disc Edition

YES! Send me information on trial copies of the new,
enhanced *Science Citation Index® Compact Disc Edition*

Name

Organization

Address

City

State

Country

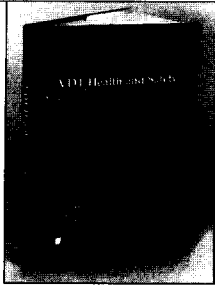
ZIP/Postal Code

Telephone

Send to: Institute for Scientific Information®

3501 Market Street, Philadelphia, PA 19104 U.S.A. 5-26-5969

Also available on CD, the *Social Sciences Citation Index® CDE*.



Now in its second printing

Are Computer Terminals Hazardous to Health?

At Last! An authoritative, balanced and comprehensive presentation of the questions and answers surrounding this controversial public health issue affecting millions of people daily. *VDT Health and Safety: Issues and Solutions* is packed with interesting and useful information as well as practical recommendations concerning VDT (video display terminal) work and workplace design. In easy-to-understand lay terms, it relates the findings of recent research to everyday problems in the workplace. Important reports, articles, and books are identified for further reading.

"...helpful suggestions are included pertaining to workstation design intended to increase comfort and alleviate operator complaints."

BOOKLIST, February 1988.

"This volume is designed to provide useful information to people involved with VDTs (video display terminals) and VDT work so that they can make intelligent decisions about health, safety, and productivity. Academic, technical, and public library collections." CHOICE, May 1988.

"Well-documented with extensive notes and bibliography, yet clear and accessible, this book is recommended for most public and academic libraries, and for subject collections in management, information systems, ergonomics, and general science." LIBRARY JOURNAL, August 1988.

VDT Health and Safety: Issues and Solutions

By Elizabeth A. Scalet
Preface by T.F.M. Stewart

"The hoopla surrounding the health risk posed by long-term exposure to video display terminals is dispelled in a clear and objective presentation of the issue..."

WILSON LIBRARY BULLETIN,
November 1988.

CONTENTS: VDTs and Radiation. Eyes and Vision. Strain and Injury. Stress. Pregnancy and Reproduction. Policy and Regulatory Issues. Glossary. Notes. Bibliographies. Index. Illustrated. 157 pages, \$37.50/ISBN 0-916313-13-1. Add \$3.50 postage and handling.



Ergosyst Associates, Inc.

Ergosyst publishes source books and directories for computer and information professionals. For more information about this or other publications contact: Ergosyst Associates, Inc. 913/842-7334 or at 123 W. Eighth Street, Suite 210, Lawrence, Kansas 66044-2605.

Announcing a new international journal on...

Computer Usability and Health

Abstracts in Human-Computer Interaction is derived from up-to-date searches of the database at the Scottish HCI Centre, Glasgow, Scotland. This journal brings together the widely scattered literature relevant to the usability of computers and computer-based systems. Book chapters and conference papers are abstracted individually. Four issues per year. Up to 600 abstracts, approximately 200+ pages per issue. ISSN 1042-0193. US \$280 per year. Outside US/Canada add \$40 airmail postage.

Index to Advertisers

AD-EX Worldwide Translations	2A
Alfred Jaeger	1A
Ballen Bookseller	6A
Biosis	7A
Bowker A+I Publishing	8A
Chemical Abstracts	11A
Columbia University	27A
DataLib	12A
DataTimes	15A
Dialog	10A
EBSCO Subscription Services	17A
Ergosyst	30A
The Faxon Company	28A
The H. W. Wilson Co.	Cover III
The Highsmith Company	18A
Information Access Company	Cover II
Information Dimensions	14A
Industrial Press	19A
Inmagic, Inc.	20A
Institute for Scientific Information	21A, 29A
Micromedia Limited	9A
Monitor Publishing	22A
Newsnet	16A
OCLC	5A
Online	Cover IV
PAIS	24A
R.R. Bowker	13A
Research Books	26A
STN International	23A
Syracuse University	27A
University Microfilms International	25A, 32A

PHONEFICHE™
P R E S E N T S

3 MODERN-DAY USES of the PAPER PHONE DIRECTORY



1 *Boost a child
at the table*

Until Phonefiche, paper phonebooks were a necessary source of clutter for libraries. But with phone directories on space-saving microfiche, paper directories have become obsolete . . . except maybe for the uses you see here. Now you can fit directories covering 50,000 communities into just a few small trays. Phonefiche includes residential and business listings, Yellow Pages, information pages, maps, and indexes.

In addition to saving space, you'll eliminate the cost of staff time required to order and shelve paper phonebooks. Choose from subscriptions based on population, state, state capital, metropolitan area or region, and country.

Granted, Phonefiche isn't much of a booster chair. But if you'd like to get directories your library needs while saving money, space, and wear, write today for your free catalog.

Call UMI at 1-800-521-0600. In Canada, call 1-800-343-5299; in Michigan or Alaska, call collect 313-761-4700.



2 *Test your strength*

3 *Clutter your
library shelves*



U·M·I

A Bell & Howell Company
1-800-521-0600

Please send me a *free* Phonefiche catalog.

Name _____

Title _____

Institution _____

Address _____

City _____ State _____ Zip _____

Phone () _____

Clip (or copy) and mail to UMI, Box 51,
300 N. Zeeb Rd., Ann Arbor, MI 48106-1346, USA.

SL

Information for Contributors

- Special Libraries publishes material on new and developing areas of librarianship and information technology. Informative papers on the administration, organization, and operation of special libraries and information centers and reports of research in librarianship, documentation, educations, and information science and technology are appropriate contributions.
- Contributions are solicited from both members and nonmembers. Papers are accepted with the understanding they have not been published elsewhere. Special Libraries employs a reviewing procedure. When reviewers' comments have been received, authors will be notified of acceptance, rejection, or need for revision of manuscripts. The review procedure usually requires a minimum of eight weeks.
- Three types of original contributions are considered for publication: full-length articles, brief reports, and letters to the editor. New monographs and significant report publications relating specifically to library and information science are considered for critical review. Annotations of the periodical literature as well as annotations of new monographs and reports are published—especially those with particular pertinence to special libraries and information centers. Articles of special relevance may be reprinted occasionally from other publications.

Full-length articles may range in length from about 1,000 words to a maximum of 5,000 words (up to 20 pages of manuscript typed and double spaced). Reports will usually be less than 1,000 words in length (up to 4 pages of manuscript, typed and double spaced).

Instructions for Contributors

Manuscripts

- Put the significance of your paper or a statement of the problem first,
- supporting details and arguments second.
- Make sure the significance of your paper will be apparent to readers outside your immediate field of interest.
- Avoid specialized jargon. Readers will skip a paper they do not understand.
- Provide a title of one or two lines, up to 26

characters plus spaces per line.

- Write a brief author note, and include position title and address. In the author note, include information concerning meetings, symposia, where the paper may have been presented orally, etc.
- Submit recent glossy black-and-white photographs of the authors, if you wish.
- Insert subheads at appropriate places in the text, averaging about one subhead for each two manuscript pages. Keep the subheads short (up to 35 characters plus spaces). Do not use more than one degree of subheads in an article. Provide a summary at the end of the article.
- Mail one original and three copies (in English only) to the editor, Special Libraries, 1700 Eighteenth Street, N.W., Washington, D.C. 20009. The manuscript should be mailed flat in an envelope of suitable size. Graphic materials should be submitted with appropriate cardboard backing or other stiffening materials.

Style

- Follow a good general style manual. The University of Chicago Press *Manual of Style* is appropriate.

Format

- All contributions should be typewritten on white paper on one side only, leaving 1.25 inches (or 3 cm) of space around all margins of standard, lettersize (8.5 x 11 in.) paper.
- Double spacing must be used throughout, including the title page, tables, legends, and references.
- The first page of the manuscript should carry the first and last name of all authors, the institutions or organizations with which the authors were affiliated at the time the work was done (present affiliation, if different, should be noted in a footnote), and a notation as to which author should receive the galley for proofreading.
- Succeeding pages should carry the number of the page in the upper right-hand corner.

Abstract

- An informative abstract of 100 words or less

must be included for full-length articles.

- The abstract should be complete in itself with reference to the paper or the literature cited. The abstract should be typed with double spacing on a separate sheet.

Acknowledgments

- Credits for financial support, for materials and technical assistance or advice may be cited in a section headed "Acknowledgements," which should appear at the end of the text.

Illustrations

- Tables or figures should be completely intelligible without further reference to the text. Letters and numbers should be distinct and large, most figures will be reduced in the printing process.
- Graphs, charts and photographs should be given consecutive figure numbers as they will appear in the text.
- For figures, the originals with three clearly legible reproductions (to be sent to reviewers) should accompany the manuscript. In the case of photographs, four glossy prints are required, preferably 8 in x 10 in.

References and Notes

- Number all references to the literature and notes in a single sequence in the order in which they are cited in the text. Cite all references and notes but do not insert reference numbers in titles or abstracts.
- Accuracy and adequacy of the references are the responsibility of the author. Literature cited should be checked carefully with the original publications.
- References to personal letters, abstracts of oral reports, and other unedited material may be included. The author should secure approval, in writing, from anyone cited as a source of an unpublished work. Be sure to provide full details on how such material may be obtained by others.
- References to periodicals should be in the following order: authors, article title, unabbreviated journal name, volume number, issue number, inclusive pagination, and date of publication.

Smith, John and Virginia Dare. "Special Librarianship in Action." *Special Libraries*

59 (no. 10): 1241-1243 (Dec 1968).

Smith, John J. "The Library of Tomorrow," in *Proceedings of the 34th Session, International Libraries Institute, city, year*. 2v. city, press, year published.

Featherly, W. "Steps in Preparing a Meritification Program in a Company." ASME Paper 72-DE-12 presented at the Design Engineering Conference and Show, Chicago, Ill., May 8-11, 1972.

- References to books should be in this order: authors, title, city, publisher, year, pagination.

Brown, Abel. *Information at Work*. New York, Abracadabra Press, 1909. 248 p.
Andrei, M. et al. *The History of Athens. The History of Ancient Greece*, 10v. New York, Harwood Press, 1850.

Editing

- Manuscripts are edited to improve the effectiveness of communication between authors and readers. The most important goal is to eliminate ambiguities.
- In addition, improved sentence structure often permits the readers to absorb salient ideas more readily.
- If extensive editing is indicated by reviewers, with consequent possibility of altered meanings, manuscripts are returned to the author for correction and approval before type is set. Authors can make additional changes at this stage without incurring any printers' charges.

Proofs

- Authors receive galley proofs with a maximum five-day allowance for corrections. One set of galley proofs or an equivalent is provided for each paper. Corrections must be marked on the galley, not on the manuscript.
- At this stage authors must keep alterations to a minimum.

"All the options for fast, easy, affordable electronic information retrieval."
—Information Today

CD-ROM PLUS
ONLINE ACCESS
AT NO ADDITIONAL COST!

WILSONDISC®

WILSONDISC OFFERS

■ CD-ROM Access

Search each database on a separate compact disc. And, with the touch of a button, you can update your search online!

■ Online Access

For access to the most current data, subscribers to each WILSONDISC database receive unlimited online search time in that database. You pay only the nominal hourly telecommunications rate—no additional charge!

Three Search Modes for Users at All Levels

1 BROWSE Mode

The same access points as the familiar Wilson printed indexes.

2 WILSEARCH® Mode

Easy-to-follow menu options simplify search formulation.

3 WILSONLINE® Mode

The same commands available with the WILSONLINE online retrieval system.

Unlimited Online Searching with Your WILSONDISC Subscription

Subscribers to a WILSONDISC database can also take advantage of unlimited online searching in that database, paying only a nominal telecommunications charge.

VIDEO!

Now available— How to Set Up WILSONDISC

(NO-CHARGE with Your Initial Subscription)
How to set up WILSONDISC and tailor it to the needs of your library.

WILSONDISC Databases

- Applied Science & Technology Index
- Art Index
- Biography Index
- Biological & Agricultural Index
- Book Review Digest
- Business Periodicals Index
- Cumulative Book Index
- Education Index
- Essay and General Literature Index
- General Science Index
- Government Publications and Periodicals*
 - GPO Monthly Catalog Index to Government Periodicals
- Humanities Index
- Index to Legal Periodicals
- Library Literature
- MLA International Bibliography*
- Readers' Guide Abstracts
- Readers' Guide to Periodical Literature
- Religion Indexes*
- Social Sciences Index

* Database not produced by The H. W. Wilson Company.

To Order Call Toll-Free: 1-800-367-6770

In New York State call 1-800-462-6060;
in Canada call collect 1-212-588-8400.
Telefax 1-212-590-1617.



**THE
H.W. WILSON
COMPANY**

950 University Ave.
Bronx, NY 10452





Over 1,200 attendees at the ONLINE '89 General Session

ONLINE '90...

The BIG Conference & Exposition For Searchers Of
Online / CD-ROM Databases And Library Micro Users
Washington, DC Hilton, November 5, 6 & 7

- How-to Online & CD-ROM Searching Sessions... • Practical Networking... • Microcomputer Applications... • New Technologies... • Information Management... • Live Demos... • Micro & Searching Workshops ...
- Technical Consultants For Hardware & Software... • Poster Sessions...
- Pre-conference & Satellite Sessions... • Big Exhibit Hall... And More

SEND FOR FREE ADVANCE PROGRAM

TO: ONLINE '90, 11 Tannery Lane, Weston, CT 06883

Please send an Advance Program to:

Name.....

Organization.....

Address.....

City..... State/Province..... Zip.....

PHONE: TOLL-FREE 1-800-248-8466 (in CT: 1-227-8466) FAX: 203 / 222-0122