and there is no easily definable product to measure in an objective fashion.

Although libraries are generally not required to provide cost accountability or to justify the costs and benefits of providing services and materials, Roberts proposes that libraries, as closed systems, should be treated as normal corporate enterprises with respect to financial management and accounting. He recognizes the difficulty in attempting to fit the essence of professionalism within constraints of cost accounting, but he does provide a framework within which to evaluate operations and conduct fiscal planning. The language of this book has a definite accounting flavor, with jargon unfamiliar to most librarians; reading through will require some investment of time and concentration. The glossary at the end is a needed and useful feature, as are the copious footnotes and references for further reading.

This volume naturally discusses library budgets, but it is not a book describing how libraries allocate funds. Neither is it a "cookbook," offering several budget models from which library managers or budgeters may select. Rather, Roberts discusses the factors upon which library cost management should be based. This logical and informed approach is not the method many libraries employ to make cost decisions. While detailed costs analysis would seem to be a profitable avenue to pursue, it requires an expertise that may not be resident in most library staffs. There is a chasm between what this work suggests (management decisions based on formal cost studies of tasks, activities, and service levels) and what actually happens in many libraries or other public service agencies. Since most libraries do not have readily available even the grossest cost information (What does it cost for an ILL transaction? What does it cost to catalog a volume?), the recommendations here for analyzing costs through rather sophisticated accounting techniques would be large steps indeed for a majority of libraries.

Moreover, if one considers that the essence of service to library clientele is not merely the hours of operation or the availability of a book on the shelf, but also the degree of professional service a user receives, then costing of library services becomes even more difficult to quantify. All of this does not suggest that libraries could not profit from the type of cost management analysis and decision making suggested in this work. What it may suggest is that an accountant's approach to providing library service may offer sound and pragmatic methods for decision making, even if that approach may not be used for all areas of library management and decision making. —John Vasi, Library, University of California, Santa Barbara.

ABSTRACTS

The following abstracts are based on those prepared by the ERIC Clearinghouse of Information Resources, School of Education, Syracuse University.

Documents with an ED number here may be ordered in either microfiche (MF) or paper copy (PC) from the ERIC Document Reproduction Service, P.O. Box 190, Arlington, VA 22210. Orders should include ED number, specify format desired, and include payment for document and postage.

Further information on ordering documents and on current postage charges may be obtained from a recent issue of Resources in Education.


This report describes efforts by three academic libraries to develop a model instructional program for online catalog users that could be adopted in other academic libraries. A key component of the research included the exploration and development of a methodology for utilizing online transaction logs to evaluate user performance. The four project objectives were to develop a model for online catalog instruction based on a set of systematic and generalizable
instructional objectives; to implement an instructional program based on the learning objectives at Northwestern University; to evaluate the success of this program through a variety of evaluative techniques, including transaction analysis; and to assess the utility of transaction log analysis as a means for instructional evaluation. The five-part report includes (1) a review of the project's objectives and some of the underlying issues that prompted this study in online catalog user education; (2) a description of the establishment of learning objectives—the framework upon which the model program is based—as well as the model itself, and a review of the process for determining generalizable objectives through collaboration among the three participating libraries; (3) a detailed description of the research design and evaluation methodology used in determining the effects of an instruction program on the model as implemented at Northwestern University; (4) the evaluation findings and principal research outcomes of the project; and (5) the principal conclusions, some general observations on the research process, and suggestions for further research. The instruments used to gather data on user performance are described and included. An extensive bibliography is among the ten appendixes included.

**Recent Publications**

**A Feasibility Study for the Development of Fee Based Services in Academic Libraries: Report to the Vice President for Business and Finance, Memphis State University.** By John E. Evans. Memphis State University, Tenn. 1984. 57p. ED 260 714. MF-$0.75; PC-$5.40.

This study is designed to illuminate some of the issues, options, and activities related to developing fee-based information services at a large academic library, and to suggest the feasibility of developing such services at Memphis State University libraries. The basis for the study is the realization that libraries, through automation, a changed philosophy about their role, and finance models, can possibly offer some solutions to the problems confronting them by extending and exploiting their information storage and retrieval and generalized information-handling talents. The study comprises three sections: (1) a literature review designed to address the scope and range of current activities at other academic libraries; (2) a survey of representative libraries designed to elicit their descriptions and comments on fee-based services; and (3) a summary of conclusions, inferences, and remaining questions appropriate to the topic. Specific methodologies

---

**CONFIDENCE**

Are you missing the confidence that comes from being well-informed? **Biological Abstracts® (BA)** is BIOSIS®' semi-monthly reference publication providing informative abstracts, in English, of current research from the biological and biomedical journal literature. It's an invaluable tool providing:

- Comprehensive coverage of biological and biomedical literature in one source.
- Monitoring over 9,000 serial and non-serieal publications worldwide.
- Approximately 235,000 items in 1986, alone.
- Four modes of access to the literature — Author, Biosystematic, Generic and Subject Indexes.
- Cumulative Index available as a separate subscription item.

Be confident — place your order for **BA** NOW. Contact BIOSIS Customer Services, 2100 Arch Street, Philadelphia, PA 19103-1399, USA or call (215) 587-4800 worldwide; toll free (800) 523-4806 (USA except AK, HI, PA). Telex: 831739.

BIOSIS is a not-for-profit organization serving the biological community since 1926. **Biological Abstracts** is a registered trademark of BioSciences Information Service.
are discussed in the first and second sections. Appendices include the survey instrument, the survey mailing list, and a bibliography.


The increased demand for library materials resulting from improved bibliographic access due to automation, and auditors' demands for more accurate accounting of library assets/holdings, have made it increasingly important that the discrepancy between the catalog and the materials in the stacks be reduced. This paper identifies many of the benefits associated with an extensive shelf inventory project in large academic and research libraries. It also describes how to determine many of the associated costs and provides a set of procedures with flowcharts. Topics covered include types of inventories; conducting a pilot inventory; conducting an inventory (developing inventory procedures, in-stack inventories, out-of-stack inventories, search procedures, and recordkeeping and statistics); and concluding remarks. Examples from an inventory conducted at the University of Kansas illustrate the procedures, and results of a survey of Association of Research Libraries (ARL) institutions are cited. A selected bibliography concludes the paper.

Information Technology R&D: Critical Issues. September 1986


This Office of Technology Assessment report on the current state of research and development in the telecommunications industry in the United States examines four specific areas of research as case studies: computer architecture, artificial intelligence, fiber optics, and software engineering. It discusses the structure and orientation of some selected foreign programs as they challenge traditional U.S. market leadership in some areas of computers and communications. Finally, it examines a set of issues that were raised in the course of the study: manpower, institutional change, the new research organizations that grew out of Bell Laboratories, and the implications of trends in overall science and technology policy. Following an implication and summary of the report, individual chapters address the following topics: (1) the environment for research and development in information technology in the United States; (2) selected case studies in information technology research and development; (3) effects of deregulation and divestiture on research; (4) education and human resources for research and development; (5) new roles for universities in information technology research and development; (6) foreign information technology research and development; (7) information technology research and development in the context of U.S. science and technology policy; and (8) technology and industry.

OTHER PUBLICATIONS


Recent Publications 525

Autumn, 1986

United Nations Publications

The World In Your Hands

Transnational Corporations in South Africa

Transnational corporations' business policies in South Africa as they relate to the issue of apartheid were examined at the United Nations during public hearings. A panel of political influentials heard from more than 50 informed persons, examined documentation, and made their recommendations. Those recommendations, the verbatim transcripts of the hearings and other vital documentation is available in four volumes.


Volume III: Statements and Submissions E.86.11.A.6789 (ISBN: 92-1-104181-3) Sold only in the 4 volume set (see below).


Volumes I through IV, set of 4 specially priced E.86.11.A.6789 $200.00

United Nations Publications

To order publications, by title and sales number, contact your wholesaler. Or order direct. For more information write for our complete 1986 catalog at the address on the right.

Publisher’s ISBN prefix (92-1)

<table>
<thead>
<tr>
<th>Volume</th>
<th>Title</th>
<th>ISBN</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Business/Economics

Transnational Corporations and International Trade: Selected Issues

E.85.11.A.4 $11.00

General

Directory of United Nations Databases and Information Systems

A repertoire of over 600 information databases in 36 UN affiliated organizations. It enables one to see what information and services are available in the United Nations family as a whole and how to obtain detailed information from particular organizations.

6Y.E.84.0.5 (ISBN: 92-9048-295-8) $35.00

Business/Economics

Directory of United Nations Databases and Information Systems

A repertoire of over 600 information databases in 36 UN affiliated organizations. It enables one to see what information and services are available in the United Nations family as a whole and how to obtain detailed information from particular organizations.

6Y.E.84.0.5 (ISBN: 92-9048-295-8) $35.00

United Nations Publications

To order publications, by title and sales number, contact your wholesaler. Or order direct. For more information write for our complete 1986 catalog at the address on the right.

Publisher’s ISBN prefix (92-1)


Volume III: Statements and Submissions E.86.11.A.6789 (ISBN: 92-1-104181-3) Sold only in the 4 volume set (see below).


Volumes I through IV, set of 4 specially priced E.86.11.A.6789 $200.00

Transnational Corporations in South Africa

Transnational corporations' business policies in South Africa as they relate to the issue of apartheid were examined at the United Nations during public hearings. A panel of political influentials heard from more than 50 informed persons, examined documentation, and made their recommendations. Those recommendations, the verbatim transcripts of the hearings and other vital documentation is available in four volumes.


Volume III: Statements and Submissions E.86.11.A.6789 (ISBN: 92-1-104181-3) Sold only in the 4 volume set (see below).


Volumes I through IV, set of 4 specially priced E.86.11.A.6789 $200.00

United Nations Publications

To order publications, by title and sales number, contact your wholesaler. Or order direct. For more information write for our complete 1986 catalog at the address on the right.

Publisher’s ISBN prefix (92-1)


Testing and Evaluation of Student Achievement in


