

ABSTRACTS

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Teaching Library Use to Undergraduates—Comparison of Computer-Based Instruction and the Conventional Lecture. Final Report. By Marina Esther Axeen. Urbana: University of Illinois, Graduate School of Library Service, 1967. 115p. (ED 014 316, EDRS price MF—\$0.50 HC—\$4.60).

The overall objective of this study was to provide specific information concerning the effectiveness of computer-based instruction in teaching the use of the library. The sixty-six students who participated in this three semester experiment were undergraduates enrolled in library science 195, a course offered for credit by the University of Illinois Graduate School of Library Science. The experimental group received their instruction by the lecture method. The author wrote a 923-frame program, excluding the "help" sequences for the Plato teaching system.

The following are some of the conclusions drawn from this study: (1) students under both treatments made significant gains in their knowledge of library use; (2) the experimental and control groups did not differ significantly in the amount of knowledge gained as a result of their respective treatments; (3) it was seen that in class the experimental group covered the same amount of material in less time than the control groups; (4) much more time was required for the initial preparation of Plato lessons than conventional lectures; (5) subsequent preparations for Plato lessons required much less time than subsequent conventional lecture preparations; (6) Plato instruction required less

teaching assistance than conventional lectures; (7) instructor's time during administration of lectures far exceeded the amount needed for the administration of the Plato method.

Feasibility of Cooperation for Exchange of Resources among Academic and Special Libraries in Pennsylvania. By Ralph Blasingame. University Park: Pennsylvania State University, 1967. 28p. (Pennsylvania State Library Monograph, No. 5; ED 016 495, EDRS price MF—\$0.25 HC—\$1.20).

This study examines the present exchange of resources by Pennsylvania academic and special libraries and suggests means for a more effective system of cooperation, based on the assumption that the state has a responsibility in this area. Questionnaires were sent to special, college, and university libraries for information on interlibrary loan involvement, and personal interviews were also held with the academic and library staffs at eight smaller colleges. Use of the Philadelphia Union Library Catalog and exchange activities of the Franklin Institute Library were both studied from samples of their requests. It was found that a voluntary system of exchange exists, and it can be described by curves of use according to type of library. Suggestions for a more effective system include: (1) agreed upon scope for the varied institutions; (2) a multi-centered and state-wide system with regional and state programs; (3) no requirements of total resource commitment or limitation of an institution's activities;

(4) goals to lower barriers to use and increase total resources; and (5) measurement of use. Initiative for the program should come from the state, and immediate further study should be followed by a detailed program statement. An appendix suggests a data bank to make certain data gathered by state agencies available.

The Columbia-Harvard-Yale Medical Libraries Computerization Project, A Review with Special Reference to the Phase I of the Project. By Ritvars Bregzis. New Haven: Yale University, 1966. (ED 019 102).

The principal goal of the project is the activation of a real-time medical literature system, with the concept for the project based on recent technological innovations and an appraisal of expected future information systems. During the first phase, a data file has been created which, with some adjustments, can be employed for time-shared interactive bibliographic information retrieval operations. The work of the project has also created staff capable of implementing more complex tasks and has demonstrated the practicability of mechanized production of catalog cards as a by-product. In view of these attainments, it is recommended that this project be continued and that the compiled data file be used for the operation, under a single authority, of a pilot system featuring interactive time-shared operations intended to provide a modest service of descriptive bibliography and to accommodate research and experimentation in more complex areas, such as subject-oriented bibliographical control. The document also includes papers by Frederick G. Kilgour on basic systems assumptions of the project (presented at the University of Minnesota Institute on Information Retrieval, November 1965) and on computer applications in biomedical libraries (given at the IBM Scientific Computing Symposium, May 1965), a report of the Subcommittee on Input Procedures for the project, the project's computer program, and directions for using the cataloging worksheet. A bibliography of twenty-six items is appended. This document is available as PB-174-524 from the Clearinghouse for Federal Scientific and Technical Information, Spring-

field, Virginia 22151. \$3.00 for hard copy, \$0.65 for microfiche.

Resources of Canadian Academic and Research Libraries. By Robert B. Downs. Ottawa: Association of Universities and Colleges of Canada, 1967. 303p. (ED 019 095, EDRS price MF-\$1.25 HC-NA).

Although it emphasizes academic libraries, this study also includes the national and provincial libraries, large public libraries, and special libraries that serve Canadian scholars, students, and research workers. With the data obtained from a questionnaire on library statistics and holdings, visits to the libraries, interviews with librarians and university administrative personnel, and a poll of faculty and student opinions on library services, four major areas were covered in the survey—resources, techniques, service, and administration and finance. The central focus of the study is the rapid increase in student population, accompanied by increase in faculty, the "information explosion," new technology, rising publishing rate, shortage of professional librarians, inadequate library buildings, changes in instructional methods, and new emphasis on research. The survey reveals that never before have Canadian libraries received the attention and support now accorded them, but successful library performance will require much progress and general improvement. Recommendations for constructive action involve the areas of written policy statements, centralization, subject specialists, book selection tools and order procedures, strong reference systems, the National Union Catalogue, photocopying facilities, buildings planned for the future, academic status for professional librarians, library automation and mechanization, cooperation, sustained and increased financial support, and improvement of resources to meet Canadian Association of College and University Libraries (CACUL) standards. A subject list of special collections in Canadian libraries, a 132-item bibliography, and the checklists of reference books and periodicals used for the survey are appended. This study was supported by the Canada Council and the Council on Library

Resources and is available for \$5.00 from the Association of Universities and Colleges of Canada, 151 Slater Street, Ottawa 4, Canada.

The Past and Likely Future of 58 Research Libraries, 1951-1980. A Statistical Study of Growth and Change, 1966-1967. By O. C. Dunn and others. Lafayette: Purdue University Libraries, 1968. 70p. (LI 000 826, EDRS price MF—\$0.50).

Data presented include: 1) a fourteen-year collection, 1950-51 through 1963-64, on which analyses were performed and predictions generated, and 2) a three-year "follow-up" collection, beginning in 1964-65, in which subsequent information has been compared with predictions. For each of the fifty-eight libraries the following statistics were obtained: volumes in and added to the collection; money spent for books, periodicals, and binding; salaries and wage expense; professional and non-professional staff size; lowest professional salary paid; and total expenditures. The following were obtained when possible: total reported enrollment; reported graduate student enrollment; and number of PhD degrees granted. This 1966-67 (fourth) issue of the report is shorter than the other issues as only that text necessary for understanding the graphs and tables has been included. For more discussion and text the earlier issues may be consulted. Availability—Library Offices, Memorial Center, Purdue University, Lafayette, Indiana 47907 (\$2.00).

Resources of Texas Libraries. By Edward G. Holley and Donald D. Hendricks. Austin: Texas State Library, 1968. 364p. (LI 000 598, EDRS price MF—\$1.50).

This study of library resources was undertaken as a part of a statewide plan for higher education in Texas. The document includes descriptions of library facilities and resources at the University of Texas at Austin, other universities, and public and private junior and senior colleges. The public library network, health science libraries, law libraries, special libraries, and emerging cooperative patterns are also described. The report's recommendations include improved bibliographic access to the

University of Texas at Austin library collections, a strengthening of the Texas State Library, efforts to increase use of existing resources, and coordination of cooperative programs. A sixty-page alphabetical subject list of areas of strength in Texas libraries has been compiled and included. Lists of one hundred basic periodicals and 257 basic reference books used to check holdings in the various libraries appear in the appendices along with two maps showing locations of public and private colleges and universities in Texas. Availability—Edward G. Holley, Director of Libraries, University of Houston, Houston, Texas 77004 (Free).

Report on a Statistical Study of Book Use, Supplemented with a Bibliography of Library Use Studies. By Aridaman K. Jain and L. Carroll DeWeese. Lafayette: Purdue University Libraries, 1967. 337p. (ED 018 244).

The problem of predicting the patterns of use of library materials in order to decide which monographs should be removed from a main collection and placed in storage is studied in this report. Specifically, the study examines previously developed mathematical models and develops new mathematical models and statistical techniques for studying the dependence of circulation rate on a book's age and other characteristics. The dependence of circulation on age since acquisition is studied directly while some other characteristics, such as library environment, subject matter and language of the monograph, are studied indirectly by dividing the total collection into homogeneous groups of books on the basis of these characteristics. In spite of recent tendencies to overemphasize the usage histories of library materials and play down the role of age, the study shows that age is a significant variable in predicting the rates of usage of monographs and in deciding which monographs may be removed from a library's main collection. Appendices include: 1) a state-of-the-art examination of use studies; 2) a bibliography of 547 use studies prepared by L. Carroll DeWeese, who supplemented and updated the 1964 bibliography of use studies by Richard A. Davis and C. A.

Bailey; and 3) a bibliography of eighty-four items compiled by the author of this study. This report is a Purdue University doctoral thesis and is available as PB-176-525 from the Clearinghouse for Federal Scientific and Technical Information, Springfield, Virginia 22151, \$3.00 for hard copy, \$0.65 for microfiche.

A Feasibility Study for a Joint Computer Center for Five Washington, D.C. University Libraries. By Ralph Parker. Washington: Consortium of Universities, 1968. 44p. (LI 000 509, EDRS price MF—\$0.25 HC—\$1.84).

This study was conducted to determine the economic feasibility of a joint computer center and to analyze the potential for such a center to become part of long-range plans for regional and national computer networks. It was found that: the bases for fruitful interlibrary cooperation within the consortium already exist; it is necessary to create tools for locating materials; the library operations are large enough and there is sufficient duplication of materials among the libraries to justify use of a jointly operated computer system for record keeping functions; and new techniques and data sources in machine readable form are increasing the potentialities of computers in libraries. Four alternatives are proposed: 1) an approach involving independent action by each library, except for circulation records, is not recommended; 2) a jointly operated small-to-medium-size computer, to be operated in batch mode with basic records maintained on tapes, is recommended for implementation at this time; 3) although now too costly, a sophisticated system involving massive on-line storage and use of remote terminals should follow the above system; and 4) a system involving a central facility for storage of little-used material and capability of facsimile transmission is recommended for re-study in another decade. A list of the consortium universities is appended. This study was conducted under a grant from the Council of Library Resources to Georgetown University.

Characteristics of Professional Personnel in College and University Libraries. Final Report. By Anita R. Schiller. Urbana:

University of Illinois, Library Research Center, 1968. 129p. (LI 000 863, EDRS price MF—\$0.75 HC—\$5.24).

The objectives of this survey were to describe the characteristics of librarians employed on the staffs of the more than 2,000 higher educational institutions in the United States in 1966-67, and to identify and examine relevant man power issues. The report is based on the responses of 2,282 individuals, or 93 per cent of 2,459 sampled full-time employees. Geographic origin, age, marital and family status, professional and academic degrees held, present positions, academic status and rank, and salaries are reported for all academic librarians, and for men and women. Data from other relevant studies are used to indicate trends and comparisons. Opinions of library career and of salary are reported. Major manpower issues are seen as: the importance of challenging work as a characteristic of the library career; recognition of special problems in librarianship where women are a numerical majority; need to eliminate discrimination; importance of full faculty status for academic librarians; and need for more equitable salaries. Appendix A (pages 93-104) contains a technical note on sampling procedures and results by James W. Grimm.

Reference and Research Library Needs in Michigan; a Study of Resources, Needs and Patterns of Use with Recommendations for Improvement in Service. Lansing: Michigan State Library, 1966. 197p. (LI 000 595, EDRS price MF—\$0.75 HC—\$7.96).

The objectives of the study were to determine the extent and nature of unmet needs of users of reference and research library resources and to propose measures to meet those needs. Data on research library use were collected by three questionnaires sent to four groups of users: 1) all faculty members of four-year public and private institutions of higher education in Michigan; 2) all teachers of off-campus university courses from the nine public universities and colleges offering such programs; 3) a sample of elementary and secondary public school teachers; and 4) a sample of manufacturing executives.

Interviews with selected librarians, faculty members, and administrators yielded additional data. A study of interlibrary loan slips and non-registered borrowers' cards from selected major libraries in the state, and earlier studies and reports of libraries complete the data sources. The five major recommendations are: 1) establish intermediate reference centers; 2) designate as statewide resource libraries the Detroit Public Library, the Michigan State Library and the libraries of Michigan State University, Wayne State University, and the University of Michigan; 3) provide library collections and facilities for off-campus students; 4) the Michigan State Library should prepare and distribute a union list of serials; and 5) establish a coordinate council on reference and research library resources.

Library Technology in California Junior Colleges, Papers Presented at a Conference on the Training of Library Technical Assistants. Washington, D.C.: Communication Service Corporation, 1968. 76p. (LI 000 593, EDRS price MF—\$0.50 HC from publisher \$2.00).

This conference was held to provide a forum for wide-ranging discussions of library technical assistant training. Junior college educators and library personnel from school, college, and special libraries presented papers on these topics: 1) the junior college perspective on library technology, including the education of library technical assistants and programs in California; 2) areas of service for the library technical assistant in public, special, and school libraries; 3) the administration and development of library technology programs, with discussions of program funding, the labor market, recruitment and placement; 4) the relation of library technical assistant training programs to professional associations; and 5) the future of library technology programs, with five

kinds of information workers suggested—teacher assistants, library technicians, museum technicians, media technicians, and data processing technicians.

Study to Develop a Research Program for the Design Development of Modern College Libraries. Final Report. McLean, Va.: Historical Evaluation and Research Organization, 1968. 108p. (LI 000 818, EDRS price MF—\$0.50 HC—\$4.40).

This study formulates a research program to facilitate the establishment of libraries for small liberal arts colleges using modern library methods and technology and new techniques of information storage, retrieval, and transfer. As a result of interviews with librarians and others in the United States and Europe and from a review of current literature, areas in which further research is needed are defined as: 1) systems analysis and design; 2) new technology and techniques; 3) coordination of administration and user-oriented service; 4) interrelationship of education, information, and library services; and 5) potentialities of information storage and retrieval. New educational concepts and techniques affecting libraries include more independent study, integration of academic disciplines, audio-tutorial teaching methods, learning centers, and the library-college. The ambiguous relationships of non-book information media—audio-visual, reprographic, miniaturized, and automated—to the college library require clarification. The objectives of education, the role of the library and the librarian, coordination with the faculty in book selection, budget problems, potentialities of the computer, interlibrary cooperation, cost effectiveness, and decentralization *vs.* consolidation, are problems that need study as a basis for development of a new college library. A detailed outline of a research program is included. ■ ■