from this volume, except in very large categories, the relevant information about potential consultants. The volume seems to assume that anyone who calls himself a consultant, or who has worked on a few jobs, is one. This just isn't so. Evaluations of the work of a consultant are essential if one is to get the kind of help he needs.

A librarian needing a consultant can find a long, unevaluated list of potential consultants from this volume, but he will have to spend a great deal of time by correspondence, telephone calls, and visits to existing libraries to find the right consultant for his problem. Dangerous and difficult though it would have been, the editors of this volume could have increased its value if they had tackled the problem of qualitative evaluations of the consultants they have listed. Perhaps without this, one would do just as well by consulting the headquarters of the American Library Association, bad though that may be at times.—Ralph E. Ellsworth, University of Colorado.

ABSTRACTS

The following abstracts are based on those prepared by the Clearinghouse for Library and Information Sciences of the Educational Resources Information Center (ERIC/CLIS), University of Minnesota, 2122 Riverside Avenue, Minneapolis, Minnesota 55404.

Documents with an ED number may be ordered in either microfiche (MF) or hard copy (HC) from ERIC Document Reproduction Service, National Cash Register Company, 4936 Fairmont Avenue, Bethesda, Maryland 20014. Orders must include ED number and specification of format desired. A \$0.50 handling charge will be added to all orders. Payment must accompany orders totaling less than \$5.00. Orders from states with sales tax laws must include payment of the appropriate tax or include tax exemption certificates.

Documents available from the Clearinghouse for Federal Scientific and Technical Information, Springfield, Virginia 22151 have CFSTI number and price following the citation.

Cooperative Services for "Big Country" Libraries. Report of a Survey with Recommendations for Cooperating among Libraries of All Types in Thirty-six Counties of West Central Texas. By Dorothy Sinclair, and others. Austin: Texas State Library, 1969. 176p. (ED 032 093, MF—\$0.75 HC—\$8.90).

This study was conducted to explore possibilities for cooperative library activities in the thirty-six county region of the Abilene Major Resource System which has the Abilene Public Library as the Major Resource Center. The report begins with a consideration of the region as an environment for public library service, followed by a detailed assessment of the thirtyfive public libraries. In addition to a consideration of the locally provided services and collections, there is a description of the Texas State Library's Major Resource Center and Area Library program as it affects the region. Consideration of academic libraries includes an assessment of services and collections and a description of resources outside the region to which the academic library group has access. The description of the school library situation includes comments on the regional centers recently established to assist local school districts and their libraries. The relatively few special libraries in the region are also described. The major needs identified are (1) publicity on the importance of libraries, (2) cooperation among existing libraries of all types, (3) establishing long-range goals for the libraries of the region, and (4) strengthening the Abilene Public Library in its leadership role. Specific recommendations for implementing these needs are made.

Feasibility Study for Incorporating a Year Abroad in the Library Science Curriculum. Final Report. By Frances Laverne Carroll. Norman: Oklahoma University, School of Library Science, 1969. 51p. (ED 032 094, MF-\$0.25 HC-\$2.70).

The purpose to be accomplished by study abroad is the education of society through the improvement of the educational opportunities for librarians who directly influence libraries in the social order. A year's study abroad would be a means of (1) introducing the treatment of other cultures which is needed for increased understanding of human nature, and (2) eliminating cultural bias in librarianship. In Part I the purposes of study abroad in library science are listed and discussed. Part II covers utilization of study abroad in education for librarianship. Part III lists and discusses criteria for selection of major cooperating schools in Germany and the British Isles.

Supplement to a Study of Extra-Institutional Use of Libraries by Ohio Academic Personnel. By Barbara Dennison. Columbus: Ohio State Library, 1969. 146p. (ED 033 736, MF—\$0.75 HC— \$7.40).

The study for which this supplement was prepared consisted of an investigation of the use of libraries outside their own campus by the students, faculty, and research personnel of Ohio colleges and universities. The results, conclusions, and recommendations based on the data col-lected are published separately (ED 033 735). This supplement consists of tables and maps, grouped by region, which show the borrowing patterns for every Ohio college and university included in the original study. These data were obtained from the interlibrary loan records of the institutions surveyed, covering the twelvemonth period between June 1967 and July 1968. The table for each institution shows the total number of items borrowed from

other colleges and universities in the state, from nonacademic libraries throughout Ohio, and from academic and nonacademic institutions in other states. The number of theses and dissertations are noted separately. The maps included with the tables illustrate the in-state borrowing patterns, both from academic and nonacademic libraries, for each institution.

A Study of Extra-Institutional Use of Libraries by Ohio Academic Personnel. By A. J. Goldwyn and Edward Verhosek. Columbus: Ohio State Library, 1969. 179p. (ED 033 735, MF—\$0.75 HC— \$9.05).

This study, supported by Library Service and Construction Act, Title III funds, was intended to investigate (1) the volume of library traffic between and among all Ohio campuses; (2) the kinds of libraries patronized by Ohio academic personnel; (3) the characteristics of those nonacademic libraries which were patronized (or at least of those parts of their collections which were used); (4) the variations in extra-institutional (off-campus) use according to the characteristics of each "home" institution; (5) other patterns of use; and (6) a methodology which could be utilized in this study and tested for other uses. Basic to the investigation were the plans of the Ohio College Library Center. Both formal (ILL) and informal (personal) use of academic and other libraries were investigated. Study findings include: (1) a need for changes in interlibrary loan forms; (2) the sovereignty of Case Western Reserve University, Ohio State University, Oberlin College, and the University of Cincinnati as sources of library materials; (3) library activity outside of Ohio concentrated in the northeastern part of the U.S.; (4) Ohio academic personnel using libraries in Ohio more than those out of state; and (5) the need for further use studies and a review of the experience of academic libraries using teletype. An annotated bibliography of 178 items is appended.

Criteria for Evaluating the Effectiveness of Library Operations and Services. Phase III: Recommended Criteria and Methods for Their Utilization. By C. J. Wessel and K. L. Moore. Dover, N.J.: Picatinny Arsenal, 1969. 104p. (available from the Clearinghouse for Federal Scientific and Technical Information as AD 682 758, MF—\$0.65 HC—\$3.00).

This report assesses and recommends criteria and methods for evaluating the performance (effectiveness and efficiency) of technical library operations and services. These criteria and methods include those identified in the state-of-the-art of library evaluation (existing criteria and methods) and those developed by adoption of criteria from the state-of-the-art of "scientific management" (candidate criteria and methods). The final product is a list of recommended criteria and associated methods of implementing them. There are four proposed techniques: (1) SCORE Analysis-a technique to measure the effectiveness of a service and the associated change in effectiveness due to a change in operations or costs; (2) scour Analysis-a technique to determine the optimum balance between operations which yields maximum effectiveness within budget constraints; (3) CORE Analysis-a technique to derive unit cost standards for given operations which produce a given quality of output; (4) GAME Analysis-a technique to eliminate unnecessary work or excessive delays, to arrange work in the best order, to standardize usage of proper work methods, and to develop time standards to accomplish essential events.

Selective Dissemination of Information (SDI); Analysis of Experimental and Operational SDI Services, 1967. By Alexander G. Hoshovsky. Arlington, Va.: Office of Aerospace Research (Air Force), 1969. 71p. (available from the Clearinghouse for Federal Scientific and Technical Information as AD 691 012, MF-\$0.65 HC-\$3.00).

The impetus for the nationwide study of SDI (Selective Dissemination of Information) came from the desire to learn more about the options available for the application of the SDI concept prior to decisions about its possible use in Air Force research and development activities. For this purpose, data on user populations, literature coverage, methods of establishing and maintaining profiles, as well as information on the supporting equipment and special techniques, were sought. The findings and conclusions of this report have been drawn from the analysis of operational characteristics in thirty-eight SDI services of the United States, and three SDI services of the United Kingdom; this represented a major portion of some fifty systems known to be in operation as of August 1967. The principal data collection and verification tools consisted of structured questionnaires, phone interviews, and published literature on specific SDI systems. To insure accuracy of data, all of the respondents were asked to review and comment on the first draft report. Their responses and critique are incorporated in this report.

A Program for a National Information System for Physics—1970–1972. New York: American Institute of Physics, Information Division, 1969. 183p. (available from the Clearinghouse for Federal Scientific and Technical Information as PB 185 388, MF—\$0.65 HC—\$3.00).

A program is presented for a National Information System for Physics based on a computerized AIP (American Institute of Physics) Information Service which is designed to augment the element of selectivity of the present information system for user interests. It is proposed that the system be developed in discrete stages, each adding to the capabilities of the system at the prior stage, in such a manner as to make use of the experience gained from pilot operation of one stage in completing the design of the subsequent one. Requirements for, as well as the capability of the AIP to implement the system starting in 1970, are documented.

Overlapping Coverage of "Bibliography of Agriculture" by 15 Other Secondary Services. By Charles P. Bourne. Palo Alto: Information General Corp., 1969. 79p. (available from the Clearinghouse for Federal Scientific and Technical Information as PB 185 069, MF-\$0.65 HC-\$3.00).

This report presents the results of a study of the nature and extent of overlap in coverage by the "Bibliography of Agriculture" (B of A) and fifteen other abstracting and indexing services. Using a sample of over 5,000 citations from 1967 issues of B of A, literature searches were made in fifteen other related services to determine the extent and nature of overlapping coverage. One of the major findings was that approximately 54 percent of the B of A citations were not covered by any of these fifteen other services. The material covered uniquely by B of A was not significantly different in national or linguistic origin or form of publication from the B of A material that was overlapped by the other services. A total of 156 different combinations of overlapping coverage were noted. The greatest amount of overlap was provided by "Pesticides Doc-umentation Bulletin," "Biological Ab-"Chemical Abstracts," "Biologistracts." cal and Agricultural Index," in that order, with no single service overlapping more than 20 percent of the B of A data base.

Conversion of Retrospective Catalog Records to Machine-Readable Form; A Study of the Feasibility of a National Service. Washington, D.C.: Library of Congress, 1969. 242p. (ED 032 895, MF—\$1.00 HC available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. as LC 1.2: M18/5, \$2.25).

This report examines (1) the present state of the art of hardware and software applicable to large-scale conversion, storage, and retrieval of retrospective bibliographic information; (2) the organizational and administrative aspects of the task; (3) costs of hardware, software, and manpower; and (4) possible approaches to the timing and funding of the project. The main body of the report examines the various problems involved and explores possible solutions. It is concluded that (1) the MARC (Machine Readable Cataloging) service should be expanded to cover all languages and forms of material; (2) conversion for a national bibliographic data base requires standardization of bibliographic content and machine format; and (3) large-scale conversion should be accomplished as a centralized project. Ap-

pendices discuss (1) duplication (overlap) in U.S. library collections, (2) actual and planned data conversion activities in selected libraries, (3) a summary of interviews with consultants, (4) the history and future of Library of Congress (LC) catalog records, (5) changes in LC catalog cards, (6) completeness of machine-readable catalog records, (7) format recognition, (8) computer requirements for a national bibliographic service, and (9) staff complement and unit costs.

Authoritarianism and Censorship: Attitudes and Opinions of Students in the Graduate Library School of Indiana University. A Report of an Exploratory Project Conducted as a Preliminary for a Proposed Nationwide Study of American Public Librarians and Intellectual Freedom. By Charles H. Busha. Bloomington: Indiana University, 1969. 48p. (ED 033 727, MF-\$0.25 HC-\$2.50).

This study attempts to measure the attitudes toward intellectual freedom held by a group of future librarians and to correlate these findings with certain syndromes of authoritarianism as reported in "The Authoritarian Personality," by T. W. Adorno, and others (New York: Harper, 1950). The hypothesis is that graduate library students who express approval of or display a tendency to agree with restrictive controls on intellectual freedom will also concur with many of the attitudes characteristic of the authoritarian syndrome. If the hypothesis is correct, those students whose opinions score high on a censorship scale will also score high on the authoritarianism scale (Fascism or F scale). The questionnaire, distributed to students in December, 1968, contained twenty-seven statements about intellectual freedom, book selection, and the role of the librarian interspersed with the eighteen questions from the F scale test. The findings of the study support the hypothesis that library school students who show a tendency to agree with restrictive measures on intellectual freedom also agree with attitudes characteristic of the authoritarian syndrome. The study did not reveal that a large number of students agree with either censorship measures or with authoritarian attitudes. A copy of the questionnaire is appended.

Libraries in North Carolina Public Senior Colleges and Universities: Present Status and Future Needs. Raleigh: North Carolina State Board of Higher Education, 1969. 53p. (ED 029 657, MF— \$0.25 HC—\$2.75).

This report is based on a study of fifteen public senior college and university libraries in North Carolina as of June 30, 1968, conducted by Robert B. Downs. The libraries in most of the colleges and universities suffer from deficiencies in holdings, shortages in qualified personnel, and inadequate space. These problems result from increases in numbers of students and faculty, expansion of academic programs, increase in the number of books and periodicals published, high deterioration rates of existing holdings, and inadequate financial support. The Board of Higher Education recommends that: (1) the book, periodical, and binding budgets be increased at all public senior institutions depending upon needs; (2) institutions reach specified goals for minimum numbers of volumes by 1975; (3) institutions not designated as depositories for Federal Government publications become depositories; (4) the ratio of clerical staff to librarians be raised to two to one; (5) the ratio of librarians to students be raised to one librarian for every 300 students; (6) library seating accommodate 25 percent of student enrollment; (7) administration, faculty, and library staff explore ways of cooperating to improve services; (8) a study be initiated to determine the feasibility of a central research library facility for the state.

The Ecology of Study Areas. By Robert Sommer. Davis: California University, 1968. 72p. (ED 032 906, MF—\$0.50 HC—\$3.70).

This project was conducted to determine the conditions that make a satisfying study environment in colleges and universities and to relay the findings to those who

design and manage educational spaces. The investigation focused upon the process of studying and its relation to environmental setting, and data was primarily gathered through site interviews at twenty-four institutions of higher learning in northern California. Six complementary questionnaires, consisting of open-ended and multiple-choice items, were used for the interviews. Those cover room studying, library studying, general environment, library-residence comparison, and distractions. Other small-scale investigations on related matters were also undertaken. The survey findings and recommendations are grouped according to specific study locations: (1) library reading areas, (2) dormitories, (3) cafeterias and lounges, (4) empty classrooms, and (5) outdoor areas. Findings make it clear that an effective study environment is as much a matter of administrative rules and educational programming as architecture. To reach librarians, residence hall managers, and others who administer educational spaces. the author has written a number of articles based on the study findings for professional journals. References to these articles are included in this report. The six questionnaires used in the site interviews are appended.

 A Bibliographic Bank for Resource Sharing in Library Systems: A Feasibility Study. Final Report. By Eugene S. Schwartz and Henry I. Saxe. Chicago: Illinois Institute of Technology, Research Institute, 1969. 226p. (ED 033 737, MF -\$1.00 HC-\$11.40).

This study of resource sharing among public libraries was made possible by six library systems in northern Illinois. With the organization of the library systems and development of interlibrary loan services and other cooperative activities, the problem of extending resource sharing among member libraries and between library systems arose. Several library systems have initiated union catalogs and a primary consideration of this study has been the status and utility of those union catalogs. The study indicated that union catalogs for library systems will not be of much practical value in interlibrary loan services and that money and effort can be better expended in other directions. The direction with the greatest potential is automated centralized processing and cataloging. The cataloging performed by the Library of Congress and available in its catalog cards and MAchine-Readable Cataloging (MARC) magnetic tapes is a means to avoid unnecessary cataloging duplication and provides a convenient tool for automated processing.

Information Entrepreneurship and Education, Prescriptions for Technological Change. By Rowena W. Swanson. Arlington, Va.: Air Force Office of Scientific Research, Directorate of Information Sciences, 1969. 47p. (Available from the Clearinghouse for Federal Scientific and Technical Information, Springfield, Va. 22151, as AD 686 093, MF—\$0.65 HC— \$3.00).

The author maintains that information entrepreneurs are necessary because of the greatly increased production of information and the increased importance of information for science and technology. The roles of the National Aeronautics and Space Act of 1958 and the State Technical Services Act of 1965 in the establishment information services are discussed. of Three of the state programs established under the State Technical Services Act are described. including the Pennsylvania Technical Assistance Program (Penntap), New York's program, and North Carolina's Industrial Extension Service (IES). The next sections of the report are devoted to the benefits to industry of information services and the education of information scientists. Appendices II through V include syllabi and course descriptions for information science education. . .

CORRECTIONS

In Norman D. Stevens' article, "Three Early Academic Library Surveys," (November, 1969 *CRL*) p. 500, James Wyer's middle initial was given as L rather than I, and he received a Pd.D. degree, not a Ph.D. Also, on p. 502, Goodrich's first name is Francis.

In Ralph Lewis' article in the same issue, "Book Reading Among College Students in Pusan, Korea," Table 3 on p. 521 erroneously included K. Mansfield and B. Russell among the ten most popular American authors. The eighth and ninth most popular American authors should have been Nathaniel Hawthorne and Willa Cather.