

## Planning Improved Library Service for Scientists in Universities

*The improvement of information services to scientists in academic libraries, though a desirable objective, will not by itself make the library the important information source that librarians would like it to be. A step toward this goal is the identification and testing of additional information services that the academic library might provide. Information services not usually provided by academic libraries were offered at Florida State University for a year and a half to a group of scientists as part of a study of personal indexes. More such studies are needed in planning future academic library service.*

IN A RECENT PAPER David Kaser has pointed out: "Unfortunately, the level of library service most of our academic institutions have rendered in the sciences in the past has been almost uniformly bad."<sup>1</sup> Whether or not we agree with this statement, argued in some detail—and I for one do agree—there is evidence that academic libraries are not the most important information source for the scientist, despite librarians' wishes to the contrary. There are valid reasons for this. Scientists have other and, at least to their mind, better and more convenient information sources. For current awareness, these include preprints and informal communications from colleagues, attendance at meetings, and subscription to primary and secondary journals. To get an answer to a question, information sources other than the library include the scientist's personal file, his colleagues, and information

analysis centers. It stands to reason that it is easier or at least more convenient to look in one's own files or call a colleague for information than to go to a library, leaving for the moment the question of reliability or completeness of information obtained in this way. And while information located in the library may be more reliable and complete in some respects, it may not be so in others. University libraries may not have the very latest information on a subject if it has been distributed only in preprints or privately circulated informal reports. Also, some documents to be included in the library collection may only be available after an unacceptable delay or may not be retrievable because of inadequacies in the cataloging or indexing.

Some of the obstacles and deterrents to library use are now being corrected. Academic libraries throughout the country are reviewing their acquisition, processing, cataloging, and circulation procedures to speed up and obtain better control over the total operation. Improved bibliographic control, along with greater use of teletypewriters and photocopiers, are speeding up interlibrary loan service. But improving existing operations to an acceptable level of efficiency by means of improved manual or ma-

<sup>1</sup> David Kaser, "Academic Science and the University Library," *University of Tennessee Library Lectures Numbers 16-18*, Thomas T. Rogers, ed. (Knoxville: University of Tennessee, 1966), p. 13.

Mr. Jahoda is Professor, Library School, Florida State University, Tallahassee, Florida. Research was sponsored by the Air Force Office of Scientific Research, Office of Aerospace Research, United States Air Force, under AFOSR Grant Number 895-65.

chine-based procedures is only part of the answer. Additional information services must be offered if academic libraries are not to remain relatively unimportant information sources for the scientist. Walter M. Carlson, director of technical information for the Department of Defense, writes that librarians in research libraries have chosen to perform what is primarily an archival function and that new developments in information service are being developed outside of the traditional library.<sup>2</sup> It may well be that there are no additional information services that the academic library can perform better than other components of the over-all information network. But this point has not as yet been proven. Furthermore, it can be argued that the testing of additional information services which may or may not turn out to be useful is inappropriate in view of the already over-extended personnel and financial resources of university libraries. Before we reject the possibility of testing additional information services as impractical, thus in effect agreeing to continue what might be characterized as low-level information service, we should consider several points. Now is the time to plan for academic library services that will be offered ten or more years from today. There is a long lead time between the planning and implementing of changes in large scale information systems. The new or changed information systems or services have to be tested on a small scale, funded, and tried in parallel with existing information systems, to mention only the most time-consuming steps. This lesson has been clear to many librarians who have converted manual serial records into machineable form.

As things stand now, librarians, with some exceptions, are not taking the lead in planning the information systems for

the future. There is danger that because of this, the emphasis will be on equipment that might be used in information systems rather than on the intended recipients of such service. Perhaps another lesson can be learned from the early machine-based indexing systems of ten or more years ago. The history of the Chemical Biological Correlation Center is a case in point.<sup>3</sup> With the benefit of hindsight we can say that at least some of the early machine-based indexing systems placed greater emphasis on equipment capabilities than on users' needs. Some of these systems suffered from lack of use and have since gone out of existence. How can costly mistakes that may well retard developments in this field be avoided? It seems to me that we must be very conscious of the information-gathering habits of the scientists of today and realize that such habits are changed very slowly. We must also involve the users in any contemplated changes of the information system.

#### ADDITIONAL INFORMATION SERVICES OFFERED IN A UNIVERSITY AS PART OF A PERSONAL INDEX STUDY

A small-scale experiment in the provision of information services over and beyond services usually offered by academic libraries will now be described. This is not done because either significant or unusual results were achieved (they were not) but because this type of study appears to offer hope in determining what type of additional services might be provided, how to provide such services, and what their cost and acceptance might be. Personal indexes—defined in this study as organized collection of documents in the scientists' offices—of scientists and engineers at Florida State University have been examined in a U.S. Air Force—supported project.

<sup>3</sup> Richard M. Dougherty, "The Scope and Operating Efficiency of Information Centers as Illustrated by the Chemical-Biological Coordination Center of the National Research Council," *College and Research Libraries*, XXV (January 1964), 7-12, 20.

<sup>2</sup> Walter M. Carlson, "The Research Librarian in a Challenging Age," *Special Libraries*, LV (January 1964), 14.

The objectives of the project are to determine what types of indexes are maintained by the scientists and how these indexes are used. In this way we may learn more about the information uses of scientists, determine whether librarians can offer as an additional information service the preparation and maintenance of personal indexes, and test types of subject indexes. As an incentive for participating in the project, the scientists were offered a limited amount of assistance on any kind of information work that they might desire and be willing to delegate to the project staff. The project staff consisted of a secretary and library school students with undergraduate science degrees. No limitation was placed on the type of request the participating scientists could make. No maximum time limitation was placed on requests but the scientists were aware of the total manpower available for the project. The eleven scientists who participated in the project over varying periods during the last year and a half requested and obtained the following information services:

photocopies of documents . . . . .	731
reference questions . . . . .	4
literature searches . . . . .	17

Some comments about these information services are in order. The photocopying service was not only the most frequently requested but also the most enthusiastically received information service. Requests for photocopies of documents were called into a recording device reached by telephone, and photocopy orders were promptly filled. The small number of reference questions is not surprising since the university reference librarians now offer such service. The small number of literature searches can probably be explained in a number of ways. Researchers in universities tend to work on long-range projects that may not require frequent literature searches. Academic researchers also often have graduate as-

sistants to whom literature searches are sometimes assigned as a learning device. There is reason to believe, however, that more literature searches will be requested as scientists develop greater confidence in the librarian's ability to perform this task.

Ten of the eleven scientists who made use of the additional information services were interviewed after the project had been in operation for about a year. The scientists were asked what additional information services they would find useful if such services were to be provided by library school students with undergraduate science backgrounds and if no time limit were to be placed on these services. In addition to photocopies of documents, the preparation of personal indexes, and literature searches, one or more scientists suggested the following services:

- assistance with keeping up with the literature
- index to book being written by the scientist
- directory of intellectual resources on campus (a "who knows what" directory)
- directory of equipment in various laboratories on campus
- index to seminar papers, manufacturers' catalogs and other material now inadequately organized.

Two of the scientists indicated that they would prefer improvements in existing library services to the introduction of new services.

#### CONCLUSION

Library service to scientists in universities can and is being improved by upgrading the standards of performance of presently offered information services. Such improvements are not sufficient to make university libraries *the* important information source for scientists. It seems that a decision needs to be made and made soon on whether or not academic libraries can and should attempt to play

this new role. The possibility that, for a variety of reasons, university libraries cannot now assume any new responsibilities is not excluded. But this decision should not be made by default and without further studies. Studies are therefore suggested that are intended to identify additional information services that the academic library can do better

than other components of the information network. If such services can be identified, they should be tested on an experimental basis to determine their cost and acceptance. Whether or not academic libraries will play a more important role in providing information service to scientists is at least in part up to librarians. ■■

