Developing a health sciences library Gopher: more involved than meets the eye

By Mary Ann McFarland, M.A.L.S.
Assistant Director for Access Services

Kathy Gallagher, M.S.L.S.
Reference Librarian

Paul Krash, B.F.A.
Library Assistant

Celia Bouchard, M.I.L.S.
Education Librarian

Saint Louis University
Health Sciences Center Library
1402 South Grand
St. Louis, Missouri 63104

The purpose of this paper is to discuss the development of the Health Sciences Library Gopher at St. Louis University (SLU) Health Sciences Center. The authors will outline university criteria from the Office of Computing and Information Services, library selection criteria, bibliographical access, reference and instructional implications, data entry and maintenance, and the role of the library’s Internet Committee. All libraries have been awed by the tremendous amount of resources available through the Internet; the challenge is not to be intimidated but to be innovative in designing systems that can present these resources to the library client in the most easily understandable approaches possible. The Internet Committee in the SLU Health Sciences Center Library has designed a framework for the construction of “menus” to lead the client to selected Internet resources. Some of the issues confronted include relating the Internet resources to the library’s Collection Development Policy, coordination of Internet resources to other bibliographic sources (Journal Holdings List, Intelligent Catalog), and educating staff and clients to manage a wide range of new resources as well as traditional ones in electronic formats.

INTRODUCTION

The development of the Internet, also known as “the information superhighway,” “the network of networks,” or simply the “Net,” presents both challenges and opportunities for libraries. The Internet’s myriad electronic resources are forcing libraries to reexamine their approaches to information storage and retrieval. One of the most exciting Internet enhancements has been the introduction of Gopher, a navigational aid that significantly simplifies access to and retrieval of electronic information.

This paper discusses the development and organization of the Health Sciences Center (HSC) Library Gopher at St. Louis University (SLU). At the HSC Library, the development of the Gopher began, not atypically, because of the interest of a single staff member. Eventually, staff from every library division became involved. Complex questions arose regarding the impact on the library of both the Gopher and the Internet in general. Specifically, collection development and access issues challenged traditional library principles and required creative thinking.

LIBRARY ENVIRONMENT

The HSC is one of four SLU campuses; there are two other campuses in the local metropolitan area and a
Developing a health sciences library Gopher

The HSC includes schools of medicine, nursing, allied health professions, and public health; the Institute of Molecular Virology; the Center for Health Care Ethics; University Hospital; Wohl Institute of Mental Health; the Doctors’ Office Building; the Anheuser Busch Eye Institute; and the Learning Resource Center, which houses the HSC Library. There are seven affiliated institutions, including the St. Louis Department of Veterans Affairs Medical Center. The HSC population includes more than 2,000 students and more than 3,000 faculty and staff.

The HSC Library holds 1,600 current serial subscriptions and 48,000 monographs. There are nine faculty and twenty-six full-time-equivalent support staff. The library provides networked workstations for end-user database searching; the same workstations provide Internet access. There are twenty-three DOS workstations and ten Mac units distributed between the main facility and the library’s educational media department. A client must have his or her own password to reach the Internet unless the workstation is used with the assistance of the library staff.

INTERNET AND GOPHER

All library personnel have had access to the Internet since January 1992. An interdepartmental Library Internet Committee was formed in April 1992 to monitor the rapid development of the Internet and promote the integration of its capabilities into daily library operations. The committee has made presentations covering the Internet’s basic functions to the library staff several times and provided small-group, hands-on training sessions.

In September 1993, the Gopher utility was made available by the university’s computing and information systems department (the Gopher is available by telnet or Gopher at SLUAVA.SLU.EDU). The only criterion announced for using the software was that each campus Gopher developed must identify one person responsible for its maintenance. A protocol and software package based on the client-server model, Gopher is designed to search, retrieve, and display documents from remote sites on the Internet [1-2]. Developed at the University of Minnesota, Gopher provides a menu-based system for organizing and retrieving networked information [3]. Gopher items may be online documents, telnet sites, file-transfer protocol (FTP) sites, or other Gophers.

Immediately after Gopher was introduced, a member of the Library Internet Committee began to add resources to the campus Gopher, SLUVIEW. Gopher is a helpful and easy-to-use navigational tool, and applications to the university and HSC environments followed quickly. According to the computing and information systems department, there were nearly 10,000 connections to the system in the first three weeks after Gopher was introduced. The most popular application during that time was connecting to other campuswide information systems. The second most popular use was reviewing information from the Law and HSC Libraries [4].

The Internet Committee designed an outline for the initial arrangement of Gopher entries, demonstrated the Gopher to the library staff and to the Library Advisory Committee, notified all staff that items were being entered into the campus Gopher, and asked for suggested Gopher entries.

ORGANIZATION OF GOPHER ITEMS

The HSC Library Gopher, a product of several iterations, includes both locally mounted and remotely acquired resources. The library’s first offering was simple—a few categories of information based on some common classifications of Internet resources (Figure 1). Over several months, this arrangement was expanded, revised, and revised again.

The latest arrangement avoids jargon and describes items in each category (Figure 2). Because some Gopher resources can fit into more than one category, items are repeated when appropriate. The evolution of this arrangement is based in part on the exploration of other Gophers (i.e., those developed by Thomas Jefferson University, University of Missouri–St. Louis, Rice University, University of Michigan [5-8]) and on the realization that there is no need to be bound by traditional subject headings and authority records. There is no “right” or “wrong” way of presenting the information. It is also easy to change the arrangement of Gopher entries—much easier than reclassifying a book or adding a subject heading. The organization of the Gopher is evolving continually as additional resources are designated for inclusion. The “collection” of entries grows and changes.

GOPHER MAINTENANCE

Each new source identified as potentially useful to HSC clients is reviewed by the collection develop-
ment librarian and the Internet Committee. Once a decision is made to add a resource, the Internet is searched using Jughead and Veronica to identify link information—Internet pathways to sites providing access to desired resources (Figure 3). The links are copied to a file and evaluated for reliability and proximity (the closer the source, the faster the connection). The source then is added to the appropriate Gopher menu.

Once a month, the availability of every entry in the Gopher is verified. If a problem such as a connection difficulty is discovered with an existing entry, another source for the item is identified and substituted. For resources generated within the library (e.g., the educational media department’s Catalog of Audiovisual Items), the DOS Text Editor is used for editing, the file is uploaded to the campus VAX using KERMIT, the link file is edited, and the Gopher directories are updated.

The Gopher is maintained by a knowledgeable member of the library staff who stays in close contact with the computer and information systems department and serves as a key member of the Library Internet Committee.

COORDINATION WITH OTHER CAMPUS GOPHERS

Each library at SLU has proceeded independently in establishing its own Gopher. In contrast to the many meetings scheduled to discuss plans for an integrated online system that all the libraries will share, there has been little campuswide discussion or coordination of Gophers. Nevertheless, the development of Gophers has provided some unifying elements for university library users. Students and faculty from the School of Public Health, which is not housed on the HSC campus, can access the HSC Gopher. Plans to add a list of the library’s journal titles and its book catalog to the Gopher will greatly enhance access to library resources.

TECHNICAL SERVICES AND COLLECTION DEVELOPMENT IMPLICATIONS

The development of the HSC Library Gopher is one attempt to collect, organize, access, and retrieve Internet resources in order to meet the information needs of HSC faculty, students, and staff. This approach is no different from the one taken with print, audiovisual, or computer-assisted instruction collections; however, the collection and organization of materials available through the Internet presents many challenges.

The Internet has not been explored from a technical services perspective [9]. Should the same criteria for selection be applied to print and electronic resources? The costs, accuracy, storage requirements, and volatility of Internet resources differ from those of books and journals. Do these differences require a separate collection development or access policy? How does a library “collect” items that it does not “own” and at times may be unable to access [10-11]? Should Internet resources fit into specific subject areas designated for collecting? Does the ease of collecting or accessing electronic materials dilute or broaden the collection? Is a “Fun Stuff” category, which many Gophers present, appropriate to the mission of the library? Should library users submit requests for access to specific Internet resources as they do for traditional sources? Should the existing collection development officer be responsible for selecting resources to include on the library Gopher? Should the library load documents for review or approval?

In many ways, the nature of the Internet makes it very easy for the library to add or remove any source as desired, making the collection more liquid than stable. Is it “fair use” to bring resources into the local Gopher from remote sites, such as dictionaries and encyclopedias, that are not “owned”? How do these decisions affect record keeping and archiving? What constitutes a bibliographic record for an Internet item? How can users of traditional library tools, such as the
catalog or journal holdings list, be made aware of Internet resources? Is it reasonable to create a bibliographic record for a Gopher item that has no paper equivalent and then place that record in the catalog or journal list? Such records would be dynamic; keeping them current could be time intensive and costly.

These questions initially were posed within the Library Internet Committee and subsequently discussed by the Library Management Group. The consensus was to base the selection of Internet resources on the Library’s Collection Development Policy. In further discussions with the library’s collection development librarian, it was determined that the Collection Development Policy required modification to address some of the issues first enumerated. Work is underway to revise this policy.

The collection development librarian agreed to put a note in the library’s journal-holdings list to indicate journal titles also available through the Internet. The note reads, “Electronic version also available; ask staff for assistance.” There is, of course, concern about adding such a note. In many cases, only the recent issues of titles are available in electronic format, and there is always the possibility that the Internet source will not be accessible. In some instances, however, such as with the National Institutes of Health Consensus Statements, a note in the holdings list can be extremely helpful. There have been times when the library’s paper copy of this publication could not be located, but, through the Gopher, an electronic copy of the missing issue easily was located, downloaded, and printed for the client. A similar note about electronic access will be placed in the “notes” field in the catalog record of monographic items.

New resources for possible addition to the library’s Gopher are identified in various ways. Faculty, students, and staff are encouraged to make suggestions. The library staff and Internet Committee actively have searched out useful resources in areas of high interest and demand; such topics include AIDS, cancer, various health statistics, and sources describing the Internet itself. Items especially valuable to new Internet users also are sought out and added.

REFERENCE AND INSTRUCTIONAL IMPLICATIONS

The reference and instructional implications of the Gopher are becoming clear. The reference staff has helped identify Internet resources that directly answer the questions and meet the needs of the library’s primary clientele. They also have assisted in developing the Gopher menu and in assigning items to different menu levels. Internet classes are offered to supplement the basic introductory course offered by the computing and information systems department.

A one-hour class is devoted specifically to the use of the Gopher as a beginning Internet navigational tool.

The Gopher has enhanced the library staff’s capability to answer client inquiries. Access to resources at other institutions is as easy as access to local resources [12]. The provision of a gateway to resources that cannot be reached through traditional means builds on goals set forth in the library’s strategic plan—specifically, “to get the right information to the right person at the right time in the right format” [13]. Electronic resources found to be especially helpful include health care reform materials, curricula from other nursing schools, course descriptions from other medical schools, addresses of researchers, CancerNet information, up-to-date statistics on AIDS, Centers for Disease Control Daily Summaries, and treatment information from the PDQ database. The capability to search by keywords through the Gopher provides another dimension to the usefulness of these resources. With Gopher, information can be searched, mailed, downloaded, and printed quickly.

CONCLUSION

The construction of the HSC Library Gopher has progressed from a one-person operation aimed at making Internet resources rapidly available to a thorough review process involving the collection development librarian and the Library Internet Committee. The implications for collection development have become increasingly apparent. Steps have been taken to formalize library policies and procedures for selecting Gopher resources and making the resources known and available to users. Specifically, the library’s Collection Development Policy will be modified to address electronic resources and access, notes will be added to the library’s journal-holdings list to alert users when a title is also available on the Gopher, and notes will be added to monographic records when a title is also available on the Gopher.

Although there are many parallels with traditional collection development, the evolution of the Gopher also has raised many unique questions concerning how libraries should manage a variety of electronic materials. The transient nature of many Internet documents poses a challenge to the traditional, archival role of the library. The issues of ownership versus access and the creation and maintenance of appropriate bibliographic records—particularly for resources a library would not ordinarily acquire—are among the challenges librarians must address as electronic resources become a larger and more important part of collections. The challenge for librarians is not to be intimidated but rather to be creative in designing ways to identify, organize, and present useful resources to library clients.
REFERENCES

2. NOTESS GR. Using Gophers to burrow through the Internet. Online 1993 May;17(3):100–2.
7. RiceInfo (Rice University CWIS). Houston, TX: Rice University. Available from: RICEINFO.RICE.EDU.
10. WHELAN A. Internet resources and collection development. In: Collection development discussion list no. 361 [electronic discussion list], 1994 Feb 22. Available via e-mail from COLLDV-L@USCVM.BITNET.
11. JAFFE L. Standards. In: Library Gopher list [electronic discussion list], 1994 Jun 23. Available via e-mail from GO4LIB-L@UCSBVM.BITNET.

Received October 1994; accepted November 1994