ABSTRACT
        The growth and influence of the Internet have been
phenomenal in the past few years. Academic librarians are faced with
a new service for their clientele who, in most cases, will need
instruction in order to use the Internet effectively. Many academic
libraries are already providing training sessions for their users. A
survey of 150 libraries was undertaken to find out the state of
affairs of the Internet in academic libraries throughout the country,
with a response rate of 67% (101 libraries). The following questions
were explored: (1) Teaching methods--Which types of methods are being
used for teaching staff and the community about services provided on
the Internet? Is the library or the campus computer center
responsible for teaching users about the Internet?; (2)
Promotion--How are Internet services promoted on campus (via
workshops, news items, library instruction) and which methods work
the best?; (3) Librarians' Time and Service--Do librarians have
enough time to explore the Internet and how has it changed the
service they provide to their clientele?; and (4) Maintenance of
Search Skills--How do librarians keep up-to-date on the latest
changes and happenings on the Internet? Results showed that library
staff and community training takes place through non-credit workshops
(62%), presentations to academic departments (55%), and sessions from
bibliographic instruction (54%). Many libraries and computer centers
are conducting joint Internet presentations. The most widely-used
methods of promotion were found to be: hands-on workshops (60%);
one-on-one instruction (56%); library instruction (54%); lecture
workshops (51%); and instruction sheets (50%). Librarians are finding
it increasingly difficult to maintain their Internet skills due to a
lack of time. Five tables and one figure illustrate data. A
questionnaire for online search coordinators is provided in an
appendix. (Contains seven references.) (MAS)

ED 387 136

# INTERNET AND ACADEMIC LIBRARIANS:
## TRAINING, PROMOTION, AND TIME

Kristine S. Condic

Kristine S. Condic is an Associate Professor and reference librarian at Kresge Library, Oakland University, Rochester, Michigan 48309-4401. E-Mail: salomon@oakland.edu

## ABSTRACT

The growth and influence of the Internet have been phenomenal in the past few years. Academic librarians are faced with a new service for their clientele who, in most cases, will need instruction in order to use it effectively. Many academic libraries are already providing training sessions for their users. Which training and education methods work the best? Are library or computer center personnel promoting the Internet? A survey was undertaken to find out the state of affairs of the Internet in academic libraries throughout the country. Results indicated that many libraries and computer centers are promoting services found on the Internet with joint presentations. Librarians are finding it increasingly difficult to maintain their Internet skills because they lack the time.

INTERNET AND ACADEMIC LIBRARIANS:

TRAINING, PROMOTION, AND TIME


First, online searching was introduced to libraries, then
CD-ROMs, and now the Internet.  To keep up with this ever-
changing environment, librarians are expected to learn to search
new systems quickly in order to provide useful service to the
public.  Finding time to learn new commands and database
peculiarities can be difficult.  New online systems and online
public access catalogs (OPACs) provide their own set of problems,
but at least most librarians are familiar with the basic
structure and design of these systems.


All of this changes with the Internet.  This world-wide
collection of networks is a completely new system that defies
comparison with online databases, CD-ROMs and OPACs.  Many online
and CD-ROM databases had print equivalents, so users could
compare retrieval methods and ease of use.  In contrast, the
Internet has no precedent.  A print or online clone does not
match the vast amount of information found on the "information
superhighway".  This makes the Internet extremely difficult to
learn since no previous structure exists.


Many recognize the potential of the Internet.  The amount of

1

available information and the speed with which it (usually) can be retrieved leave the Internet impossible to ignore. But many also question the quality or validity of information since no one controls the Internet or the information found there. Since the Internet environment is constantly changing, some may find it difficult to get very excited about a pocket of information that might disappear tomorrow. Veronica, lynx, and the various gophers provide some type of organization, but their structure is completely foreign to librarians who are used to the controlled vocabulary structure of such systems as MEDLINE or ERIC.

How are librarians trained to use the Internet? How have libraries promoted the Internet? What promotional strategies are most effective? In order to answer some of these questions, a survey was sent to 150 academic libraries throughout the country. This paper summarizes the results of this survey.

## REVIEW OF THE LITERATURE

Articles describing survey results on the use of the Internet in academic libraries are appearing in rapid numbers. Ladner and Tillman sent a survey via electronic mail (E-Mail) to special librarians to determine how librarians really use the Internet. and they also found that many librarians (93%) use the Internet for E-Mail.[1] Special librarians responding to this

survey subscribe to an average of 3.3 electronic discussion groups per person. Many access remote online catalogs, but the majority of the use was for electronic mail purposes.

Lanier and Wilkins wrote a thorough state-of-the-art article in part describing a virtual reference desk from the University of California-Irvine gopher.[2] But the authors concluded that "the Internet is not likely to become a 'one-stop shop' for all ready reference queries."[3] They also voiced the popular opinion that the Internet is fairly unstable.

A few authors have offered suggestions for integrating the Internet within the existing structures of the library and campus. Radcliff, DuMont, and Gatten suggested that there should be one or two experts within the reference department to disseminate Internet information.[4] Rockman described a successful one credit course on evaluating Internet resources.[5] She stressed that the library instructor must be current about the Internet in order to present a successful course.

Fishel and Stevens presented a thorough overview of the development and enhancement of a four week course taught at MacAlester College called Research Skills in the Computer Age.[6] Students were introduced to E-Mail and discussion lists as well as remote library catalogs and DIALOG. Instructors worked closely with the computer center in coordinating their

3

activities.  The authors concluded that most effective method of training involved hands-on activities.  The authors admitted that hands-on instruction was labor intensive and usually required more than one instructor.

Miller and Zeigler coordinated their efforts with the campus computer center and developed a one-day workshop entitled "Striking it Rich with the Internet".[7]  The instruction format varied between lecture and hands-on time to complete exercises, but participants wanted more hands-on time.  The authors indicated that their cooperative efforts with the campus computer center were vital in preparing a successful workshop.

Schiller described results of an electronic survey distributed to four discussion lists which inquired whether libraries and computer centers are working together to instruct users on the Internet.  Results indicated that the two groups are indeed merging their efforts together on many campuses.[8]

Much has been written about academic libraries and the Internet, but very few articles describe training and promotional activities of librarians on campuses.  In addition, some articles contain data from questionnaires on Internet use, however, these questionnaires only collect data from librarians subscribing to electronic discussion lists or listservs.  This present study will fill a gap in the literature by describing training and

4

promotion activities of librarians even if they do not subscribe to electronic discussion lists found on the Internet.

## PROBLEMS TO BE STUDIED

Various libraries are involved with Internet promotion and training but no study has explored the types of promotion provided nor the most effective teaching methods. This study attempts to identify methods that have proven successful for academic libraries. To gather data for this study, a questionnaire was designed, and the following questions were explored:

1. Teaching Methods - Which types of methods are being used for teaching staff and the community about services provided on the Internet? Is the library or the campus computer center responsible for teaching users about the Internet?

2. Promotion - How are Internet services promoted on campus (via workshops, news items, library instruction) and which methods work the best?

3. Librarians' Time and Service - Do librarians have enough time to explore the Internet and how has it changed the service they provide to their clientele?

Ö

4. Maintanence of Search Skills - How do librarians keep up-to-date on the latest changes and happenings on the Internet?

## METHODOLOGY

A four page survey was designed and sent to Online Search Coordinators in 150 academic libraries throughout the country. The sample population was chosen by matching a random sampling of numbers to corresponding pages from the 44th edition of The American Library Directory. Libraries were identified for this sample if their entry began on the page number listed from the random number generation and they met the following criteria: a university or college library containing book titles over 200,000 or volumes over 250,000. Special and military libraries were excluded. Larger libraries were selected in hope that this would correspond to a greater likelihood of Internet availability.

Participants were asked to identify and select the best Internet promotional and training activities on their campuses. Following this were questions regarding search skill maintenance and time needed to explore the Internet. One of the final questions asked the participant to identify how the Internet has changed the way in which library services are provided.

The survey and return stamped envelope were mailed in August

1994. Reminder letters, each including a copy of the original
survey, were sent seven weeks later. To encourage response,
participants were asked if they would like a copy of the final
survey results.


## RESULTS


A response rate of 67% was achieved from 101 returned
surveys out of the total of 150. Even though the survey was sent
to the "Main Library" if one was not identified in the <u>American
Library Directory</u>, one librarian sent back three responses from
different libraries on campus. These two extra results were
considered valid which changed the total to 103 responses out of
152 surveys. Statistics were compiled using SPSS-X on the campus
mainframe.


Only one library responded that they did not have access to
the Internet. This finding may be indicative of the method of
determining the sample population by selecting only those
libraries with 200,000 or more book titles. It was hoped that
this procedure would select those campuses which were likely to
have access to the Internet, and it appears that this strategy
worked.

Since the Internet is such a unique source, it is important
to know which types of methods are being used for teaching
library staff and the campus community about services provided on
the Internet.  Participants were asked to select the types of
Internet instruction offered on campus.  Table 1 illustrates that
62% of the respondents indicated that noncredit workshops were
taught on their campuses.  Two other popular methods included
presentations to academic departments (55%) and sessions from
bibliographic instruction (54%).  The "other" category was
selected by 26% of the respondents and included such methods as
individual instruction, reference encounters, on-demand
presentations,  specialized library sessions for specific
courses, and an Internet Users Group.

INSERT TABLE 1 ABOUT HERE

When asked whether personnel from the library or computer
center presented Internet workshops, most participants indicated
that both are responsible.  Table 2 itemizes the responses.  Over
half indicated that personnel from both departments conduct their
own workshops, while joint workshops are presented on 29
campuses.  Only six participants indicated that Internet
workshops were not offered on campus.

8

INSFRT TABLE 2 ABOUT HERE

On many campuses the library and computer center each have
carved workshop roles in terms of Internet training.
Participants noted that the computer center develops workshops
describing gopher, file transfer protocol (ftp), and E-Mail while
the library handles workshops dealing with resources such as
remote library catalogs, UnCover, and FirstSearch.  Many
indicated that they are coordinating their efforts with the
campus computer center and are in the planning stage of preparing
joint presentations.

On many campuses users are taught by personnel from the
library and/or the computer center, but who teaches library staff
about the Internet?  Table 3 indicates library personnel are
taught by other librarians (80 responses) or are self-taught (67
responses).  Computer center personnel teach librarians at 26 of
the survey sites.

INSERT TABLE 3 ABOUT HERE

Promotion

The Internet is promoted in a variety of ways on campuses.
Five types of Internet promotion were selected by at least fifty
percent of the respondents.  Figure 1 illustrates that the most

9

widely used method was hands-on workshops (6ა%) followed closely by one-on-one instruction (56%), library instruction (54%), lecture workshops (51%), and instruction sheets (50%). When asked which of these worked the best, the winner was hands-on workshops with 25 respondents selecting this response. Some respondents indicated that the question was misleading ("Which one of these promotional services works the best?") since one type of promotion may work best for users while another may be more efficient for librarians. The question was intended with the user in mind even though this author clearly understands while hands-on workshops might be desired by the users, it is hardly an efficient method for the workshop instructors who spend countless hours preparing for these workshops.

INSERT FIGURE 1 ABOUT HERE

Workshops and instruction sheets were not the only responses to this question. The "other" category was selected by 15% of the respondents and included the following write-in replies: direct targeted mail, Computer Services newsletter, campus network postings, an Internet Fair, and an Internet users group. Using a variety of methods as many libraries have done is likely to attract more users than devoting time and energy to just one tried and true method.

Survey participants were asked if they, being Online Search

10

Coordinators, were responsible for promoting services found on the Internet. Over half indicated that they either were responsible or were one of many responsible for promoting services (Table 4). Many wrote in comments stating that all reference librarians are responsible yet none are, indicating that librarians may be expected to promote Internet services in their subject specialty areas even though no one person is formally overseeing the promotion efforts.

INSERT TABLE 4 ABOUT HERE

Librarians' Time and Service

In order to help others use the Internet, librarians need time to explore and become familiar with its peculiarities and nuances. It could be very difficult to find the time to explore given their existing responsibilities of reference work, instruction, collection development, and administration. When asked if they had enough time to explore the Internet and read messages, 83% of the survey participants responded that it was hard for them to find the time. Many have already canceled or decreased the number of listservs to which they subscribe, reducing the number to an average of four listservs per respondent. Some indicated that they have time to explore the Internet only during slower periods throughout the year. Only

11

14

five survey participants indicated it is not hard for them to find the time mainly because they make it a priority.

The Internet is finding its way into existing services librarians already provide. When asked if the Internet has changed the way in which library service is provided, only 17% said that no change in service has taken place yet. Many others felt there were a number of changes. Eleven percent responded that "it's just another resource to check" for reference queries, while 25% of the respondents pointed out the increased accessibility to remote catalogs and databases including FirstSearch and UnCover.

Other changes filtering through libraries involve online searching, interlibrary loan, and instruction. Many online searchers are now connecting to commercial databases such as DIALOG through the Internet to avoid long distance phone charges. And in many libraries, users are able to place interlibrary loan requests through the Internet instead of submitting paper forms. A number of respondents pointed out the need for increased instruction so that users could perform their own searches effectively.

The Internet is a constantly changing environment. This
dynamic characteristic requires users to log in frequently to
maintain and sharpen their search skills. Given the time
constraints many librarians face, how are they keeping up-to-date
on the Internet? One respondent flatly stated that "you don't
maintain your skills" on the Internet, but others were not that
discouraged and selected options provided with the question.
Ninety-two percent indicated that they just explore the Internet
when they can and many also communicate with their colleagues and
attend workshops (Table 5). Only a few participate in any of
various electronic workshops offered on the Internet. The
"other" category was selected a number of times and included the
following responses: respondents read the professional
literature, teach Internet workshops, and attend Internet
conferences to maintain their search skills.

INSERT TABLE 5 ABOUT HERE

Navigating the Internet can be difficult without aids to
point users in the right direction. At times subject guides to
the Internet, such as those found in C&RL News, may be a useful
starting point for librarians or library users. Just over half
of the respondents (53/103) indicated that these types of guides
are kept in the reference desk area. When asked if they were

13

useful, about half of them indicated so (28/53). Some librarians produce their own guides or distribute subject guides to faculty instead placing them at the desk. As far as their usefulness, one librarian stated that "I can't navigate without them" while a few others considered them outdated even at the time of publication.

DISCUSSION

Libraries and computer centers are working together to enhance Internet use on a number of campuses. It is unfortunate that this link is not more common. One survey participant wrote that the computer center has beaten the library in providing Internet assistance resulting in users going to the computer center first for their information needs. This is exactly the type of atmosphere that could develop on any campus if libraries and computer centers avoid each other. A strong link between these two is vital in order to provide the best quality service and instruction to users and also results in increased cooperation for other automation projects. If librarians want to provide electronic interlibrary loan for their clientele or assemble a local area network within the library, they may require assistance from the computer center. Regardless of the need, there is a lot to gain by having a strong connection between the library and computer center. The very existence of

17

the Internet could initiate a strong working relationship between these two.

Another emerging development that could result from the advent of the Internet is the issue of appointing one person to take responsibility for promoting Internet services. A number of survey respondents indicated that no one is responsible yet everyone is, in most cases referring to the varied responsibilities shared by reference librarians in connection with their subject expertise. On the other hand, a few libraries have passed this responsibility to specific people including the Head of Reference, Head of Instruction, Access Services Librarian, Electronic Information Resources Librarian, and Internet Specialist to name a few. Having one person formally responsible for promoting the Internet could provide uniform, enhanced service to university user groups.

Underlying Internet responsibility and instruction is the fact that few librarians perceive they can devote the time to yet another new library service. The frustration librarians feel about the lack of time poured throughout the surveys. Some connect to the Internet from their home computers just to read messages and scan listservs, while others have canceled listservs because of lack of time. Many stated that the introduction of the Internet could not have come at a worse time because of staff shortages and attrition. Others noted that finding time to keep

15

current is one thing, but applying what has been learned is quite another. A couple of respondents stated that the Internet is very overwhelming to them.

Library administrations must be supportive and assist librarians by granting release time for Internet workshops and other staff development activities for Internet training. A number of respondents voiced the opinion that their administrators did not understand the ramifications of the Internet and therefore were not supportive in training assistance or time. Administrators are encouraged to recognize the frustration the Internet can cause and allow librarians the support and time to explore its services.

CONCLUSION

Academic librarians throughout the country are trying to keep pace with the exploding nature of the Internet. Some have moved quickly into promotion and training activities while others are just starting, but librarians from both camps recognize the essential link with campus computer centers for successful training activities. As more automation projects are initiated on campuses, personnel from libraries and computer centers will be encouraged to join forces to provide the best service possible to their users. In order to facilitate this arrangement, both

16

groups need to meet on a frequent basis and recognize that each has something to contribute to a team approach. Libraries and computer centers need to work together as a merged force to so that users will not be bounced from one group to another in order to receive the automation assistance.

Librarians have identified hands-on workshops as the most successful tr:ining method even though these workshops require massive amounts of preparation time. A variety of training methods is needed on campus to cater to a varied user clientele. Library administrators need to recognize that librarians require time and academic support to initiate and carry out Internet projects.

This study has focused on perceptions of librarians, but further research is needed to identify the needs of library users. How do they actually use the Internet? What types of training methods do they find most effective? Answers to these questions from future research will help lib. rians provide effective service and instruction on the challenging nature of the Internet.

# REFERENCES

1.  Sharyn J. Ladner and Hope N. Tillman, "Using the Internet for Reference," <u>Online</u> 17 (January 1993): 45-51.

2.  Don Lanier and Walter Wilkins, "Ready Reference via the Internet," <u>RQ</u> 33 (Spring 1994): 359-68.

3.  Ibid., 364.

4.  Carolyn Radcliff, Mary Du Mont and Jeffrey Gatten, "Internet and Reference Services: Implications for Academic Libraries," <u>Library Review</u> 42 no.1 (1993): 15-9.

5.  Ilene F. Rockman, "Teaching About the Internet: The Formal Course Option," <u>The Reference Librarian</u> 39 (1993): 65-75.

6.  Terri Fishel and Jeanne Stevens, "Teaching the Internet: An Undergraduate Liberal Arts College Experience." In <u>The Internet Library: Case Studies of Library Internet Management and Use</u>, edited by Julie Still, 109-126. Westport, CT: Meckler, 1994.

7.  Donna L. Miller and Michael C. Zeigler, "An Internet Workshop for Lebanon Valley College Faculty and Staff: 'Striking it Rich with the Internet'". In <u>The Internet Library: Case Studies of Library Internet Management and Use</u>, edited by Julie Still, 167-79. Westport, CT: Meckler, 1994.

8.  Nancy Schiller, "Internet Training and Support. Academic Libraries and Computer Centers: Who's Doing What?" <u>Internet Research</u> 4 (Summer 1994): 35-47.

# TABLE 1

## TYPES OF INTERNET INSTRUCTION

"Which types of Internet instruction are offered on campus?  Please check all that apply."

N=103

| <u>Reply</u> | <u>Frequency</u> |
|---|---|
| Noncredit workshops | 64 |
| Presentations to academic departments | 57 |
| Component of bibliographic instruction | 56 |
| Component of credit course on library instruction | 10 |
| Other | 27 |
| None | 6 |

22

TABLE 2

INTERNET WORKSHOP PRESENTERS

"Do personnel from the library or computer center present Internet
workshops?  Please check all that apply."

N=103

| Reply | Frequency |
|-------|-----------|
| Library | 9 |
| Computer Center | 17 |
| Both do their own workshops | 55 |
| Both present joint workshops | 29 |
| No workshops are offered | 6 |
| Other | 2 |
| Missing | 4 |

TABLE 3

TEACHING INTERNET TO THE LIBRARY STAFF

"Who teaches library staff about the Internet?  Please check all
that apply."

N=103

| Reply | Frequency |
|---|---|
| Library personnel teach each other. | 80 |
| Library personnel are self-taught. | 67 |
| Workshop instructors teach the library staff. | 29 |
| Computer Center personnel teach the library staff. | 26 |
| Other | 9 |

TABLE 4

RESPONSIBILITY FOR INTERNET PROMOTION

"Are you responsible for promoting services found on the Internet?"

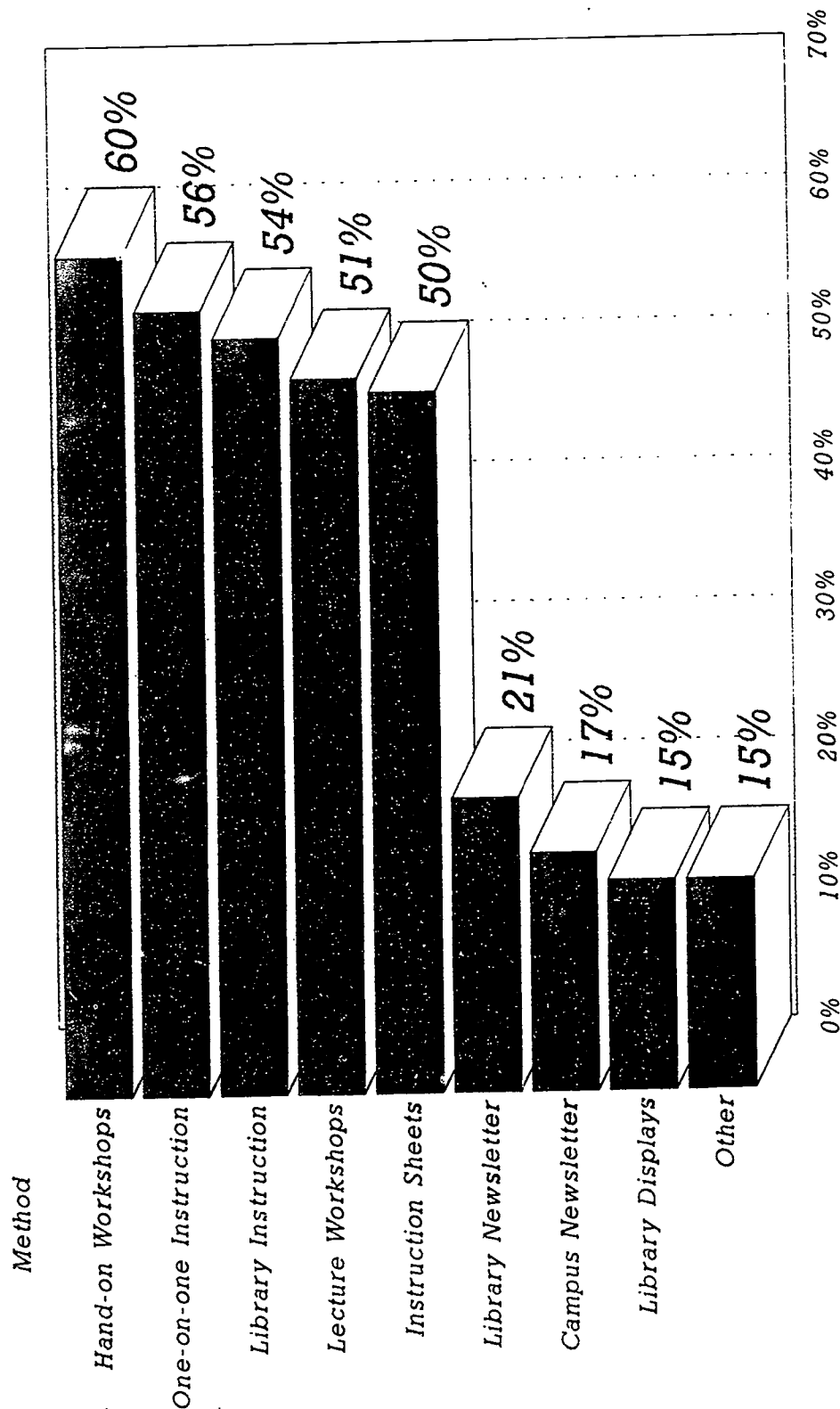| Reply | Frequency | Percent |
|---|---|---|
| Yes, I am responsible either on my own or with other librarians. | 56 | 54% |
| We don't promote services on the Internet. | 15 | 14% |
| No, someone else is responsible. | 13 | 13% |
| No, no one is responsible. | 10 | 10% |
| We don't have access to the Internet. | 1 | 1% |
| Missing | 3 | 3% |
| Other | 5 | 5% |
| | 103 | |

TABLE 5

MAINTANENCE OF INTERNET SEARCH SKILLS

"How do you maintain your skills on the Internet?  Please check all
that apply."

N=103

| Reply | Frequency |
|---|---|
| Explore the Internet when I can. | 95 |
| Communicate with my colleague(s). | 74 |
| Attend workshop(s). | 68 |
| Participate in Rick Gates' Library Hunt or similar projects | 13 |
| Other | 26 |

# Figure 1: Internet Promotion

"How are Internet services promoted on campus?"

Method

| | |
|---|---|
| Hand-on Workshops | 60% |
| One-on-one Instruction | 56% |
| Library Instruction | 54% |
| Lecture Workshops | 51% |
| Instruction Sheets | 50% |
| Library Newsletter | 21% |
| Campus Newsletter | 17% |
| Library Displays | 15% |
| Other | 15% |

N=103
Respondents could select more than one answer

# APPENDIX

## ONLINE SEARCH COORDINATORS AND THE INTERNET

1.  Are you administratively responsible for the following?  Please check all that apply:

    _____ online (Dialog, BRS) accounts administration
    _____ CD-ROM accounts administration
    _____ online catalog maintenance
    _____ software training
    _____ computer hardware/software maintenance
    _____ reference department


2.  If you are the online search coordinator, has your role changed over the past few years with the introduction of CD-ROMs and databases appearing on online catalogs?  Do you feel your responsibilities are becoming more like a systems librarian?

    _____

    _____

    _____


3.  Are you responsible for promoting services found on the Internet?

    _____ yes
    _____ no, someone else is (person's title) _____
    _____ no, no one is responsible
    _____ we don't promote services on the Internet (go to #6)
    _____ we don't have access to the Internet   (Thanks for your participation.  The rest of the survey deals with the Internet.)

4.  How are Internet services promoted on campus? Please check all that apply.

    _____ hands-on workshops      _____ instruction sheets
    _____ lecture workshops       _____ one-on-one instruction
    _____ library newsletter      _____ campus newspaper
    _____ library displays        _____ library instruction
    _____ other _____

5.  Which one of these promotional services works the best?

    _____

6.  Do personnel from the library or computer center present Internet workshops?

    _____ library
    _____ computer center
    _____ both do their own workshops
    _____ both present joint workshops
    _____ no workshops are offered
    _____ other _____

7.  Which types of Internet instruction are offered on campus? Please check all that apply.

    _____ component of bibliographic instruction
    _____ noncredit workshops
    _____ component of credit course on library instruction
    _____ presentations to academic departments
    _____ other _____
    _____ none

8. Who teaches library staff about the Internet?

_____ library personnel are self-taught
_____ library personnel teach each other
_____ computer center personnel teach the library staff
_____ workshop instructors teach the library staff
_____ other _____

9. How do you maintain your skills on the Internet?  Check all that apply.

_____ explore the Internet when I can
_____ attend workshop(s)
_____ participate in Rick Gates' Library Hunt exercises or
       similar projects
_____ communicate with my colleague(s)
_____ other _____

10. What types of Internet services are accessible to library patrons
    or reference personnel for ready reference?

_____ access to other libraries' online catalogs
_____ FirstSearch
_____ Carl's UnCover System
_____ online search systems like DIALOG or BRS
_____ other _____

11. Do you keep printed subject guides of Internet resources (for
    example, the lists found in C&RL News) at the Reference Desk?

_____ Yes          _____ No

---> Are they very useful? _____

_____

3

12. How has the Internet changed the way in which you provide services to your library clientele?

_____

_____

_____

13. Do you subscribe to any listservs such as PACS-L or LIBREF-L?

_____ Yes          _____ No

---> How many? _____

14. Is it hard for you to find the time to use the Internet, keep current on the latest changes, or read your messages?

_____

_____

15. Do you want a copy of these results sent to you?

_____ Yes                    _____ No

Thank you for taking the time to fill out this questionnaire. Please return it in the enclosed envelope by **September 15, 1994.**

32