Rural Librarians and the Internet: A Survey of Usage, Attitudes, and Impact.

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Introduction

A recent survey indicated that more than 90 percent of rural libraries are connected to the Internet (Bertot and McClure 2000). That is an incredible statistic when one considers that only five years ago virtually no rural libraries were connected to the Internet. This technology has obviously had a great impact on the rural public library. But what kind of an impact has it had? What do rural librarians think of the Internet and how are they using it? Lastly, how has the Internet changed the rural public library? Answering questions such as these was the purpose behind the current study.

Although a recent search of the literature revealed a great many articles about the Internet and libraries, there were very few studies done on how librarians use the Internet, with the exception of several studies done on how special librarians use the Internet (Scarlett, 1997 and Kirriemuir, 1999). In addition, the author was unable to locate any recent studies on how rural librarians are using the Internet. Most of the literature encountered focused on the controversy surrounding Internet filtering at public libraries.

The interest in doing the present study developed out of an earlier study (Flatley, 2000) the researcher had done in conjunction with the *Center for the Study of Rural Librarianship* at Clarion University. The purpose of that study was to determine how rural librarians viewed librarianship and libraries and the future of both. One section of that study focused on how the Internet was affecting rural libraries and librarians. The study revealed most rural librarians believed the primary purpose of the library was to provide books and other materials to the public and that technology would not replace the need for libraries and librarians. In addition, most believed the continued growth of the Internet and other online resources would not diminish the importance of the rural public library.

Objectives

The objectives of this study were as follows: (1) To determine how rural librarians use the Internet; (2) To determine the attitude of rural librarians

towards the Internet; and (3) To determine the Internet's impact on rural libraries and library users.

Methodology

Surveys were mailed to 655 rural libraries across the United States. This study defined rural as libraries serving populations of 25,000 or less. The libraries were selected from the U.S. Department of Education's publication *Public Libraries in the United States*. Libraries meeting the above definition of rural were compiled in a Microsoft Access database resulting in over 7,000 libraries. These were then arranged by zip code and every 10th library chosen. The names of the library directors were then looked up in the *American Library Directory* and entered into the database. A personalized cover letter was created and each one signed. The surveys were mailed out on November 13, 2000. Each letter included a self-addressed stamped envelope to facilitate returns. The date of November 27 was given as the designated return date.

Results

A total of 345 surveys were returned within the designated time frame. This represented a 53 percent return rate of completed surveys. Thirteen surveys were returned undelivered for various reasons.

Internet Use

The first two questions simply asked whether or not the library had Internet access. An overwhelming majority (98 percent) indicated they did have Internet access. This figure is somewhat higher than the 93.3 percent connectivity rate of rural libraries as determined by the most recent survey by the National Commission on Libraries and Information Science (Bertot and McClure, 2000). This most likely can be attributed to the fact that those without Internet connectivity were less likely to complete the survey as all the proceeding questions focused on the Internet.

The next set of questions focused on how rural librarians use the Internet. Specifically, the researcher was interested in how much time the librarians spent on the Internet and what they spent that time doing. In Q3, the librarians were asked how much time they spend on the Internet on a typical day. Table 1 summarizes the data.

Table 1
Time Spent on the Internet in a Typical Day

Time	Percentage
Less than 1 hour	29%
1-2 hours	50%
3-4 hours	16%
More than 4 hours	4%

As can be seen from Table 1 almost 80 percent of those surveyed spend an average of two hours or less on the Internet.

The next question (Q4) queried the librarians as to what they spent their time doing on the Internet. The librarians were presented with a list of common Internet activities and were asked to indicate whether or not they did that activity. Table 2 summarizes the data.

Table 2
Librarian Internet Activities

Activity	Percentage YES
E-mail	97%
Collection Development	78%
Copy Cataloging	43%
Visiting Library-Related Sites	91%
Answering Reference Questions	92%
Using Library-Related Listservs	68%
Interlibrary Loan	68%

Some of the other uses given included:
- "ordering information, catalogs, books, etc"
- "getting patrons free e-mail accounts"
- "reader's advisory"
- "registering for workshops"
- "selling rare books at auction as a fund-raiser"
- "communicating with library's main office using ICQ"

As can be seen from this data, the Internet is used for a wide variety of purposes at rural libraries. Copy cataloging was the only activity not done by most of the respondents on the Internet. This could be attributed to the fact that many small libraries are members of county systems or consortiums where the cataloging is done at a central location.

In Q5, the librarians were queried further on the depth of their Internet knowledge. Did they know how to construct and maintain web pages, program with HTML, and do online database searching? Table 3 summarizes the data:

Table 3
Please indicate whether you have done the
following within the past year

Activity	Percentage YES
Created a Web Page	31%
Maintained and/or Updated Library's Web Page	39%
Conducted Database Searches	82%
Downloaded Files	75%
Programmed using HTML	18%

As can be seen from this data, most of those surveyed have not created or maintained web pages. But, the majority have done database searching and downloaded files from the Internet.

Perceptions

There is no doubt that the Internet has had a great impact on libraries and librarians. The next set of questions focused on how rural librarians felt about the Internet and how it's affected what they do. The first question in this section (Q6) asked the librarians whether or not they believed they were keeping up with the Internet's rapid pace of change. A majority of the respondents (61 percent) indicated they believed they were keeping up-to-date though several respondents wrote in the comment "just barely" next to their answer. Only 18 percent and 21 percent, respectively, believed they were being left behind or were not sure. The most common reason given by those who answered *left behind* was they believed they did not have enough time to keep current.

The next question in this section (Q7) simply asked whether or not the librarians felt overwhelmed by the amount of information available on the Internet. A majority of respondents answered in the negative (54 percent) indicating that they do not feel overwhelmed. Thirty-six percent indicated that they *often feel overwhelmed* and 10 percent were not sure.

The next question (Q8) asked about Internet training. Specifically they were asked whether or not their library provided them with any special train-

ing. Eighty-two percent indicated that the library had provided them with some kind of Internet training. Along similar lines, Q9 asked whether they believed that they had the necessary skills to train others how to use the Internet. A noteworthy 72 percent of respondents indicated they believed they did possess the necessary skills.

Q10 through Q16 focused on how the Internet was changing the workplace. Q10 asked the respondents whether or not they believed the Internet was a major contributor to stress in the workplace. Only 7 percent indicated they believed it was. Most of the librarians (66 percent) answered that the Internet only contributes somewhat to stress at work.

Q11, Q12, and Q13 asked the librarians how the Internet has affected the workplace. In Q11, the respondents were simply asked if they believed the Internet has made their jobs better, worse, or about the same. The overwhelming majority (74 percent) answered they believed the Internet has improved their work. In the same vein, Q12 queried the librarians about whether the Internet has improved their ability to help the public. Not surprisingly, most answered in the positive (95 percent). When asked if the Internet has significantly changed what they do (Q13), most (66 percent) said that it has, 28 percent said it did not, and 6 percent said they were not sure.

Q14 and Q15 asked if the Internet and e-mail were essential workplace tools. Seventy-nine percent and seventy-two percent respectively indicated that both were essential tools.

Q16 rounded out the section on the Internet and the workplace by asking if they were concerned that they might lose their jobs in the future because of the Internet and other advances in technology. Ninety-one percent indicated that they were not concerned. In fact, several librarians commented that if anything the Internet has made their jobs more secure as more and more people come to the library to just use the Internet and online databases.

Patron Usage

The next section of the survey (Q17-Q24) queried the respondents about how their patrons were using the Internet at the library. Q17 and Q18 focused on whether the Internet has increased or decreased library usage by the public. Seventy-four percent indicated they believed the Internet has increased the number of people using the library. Only 6 percent believed they saw a decrease in library usage since they went online, 15 percent were unsure. In addition, most librarians believed the Internet was being used sufficiently by the public to justify its cost (87 percent).

When asked who used the library most often (Q22), the majority indicated that adults (63 percent) were the most common Internet users at the

library. This was followed by teenagers (31 percent), children (4 percent), and seniors (1 percent). It should be noted that many respondents indicated that there was no difference in usage between adults and teens. However these results were not tallied as the survey asked them to indicate which single group used the Internet most often.

Q19 and Q20 asked the respondents respectively whether or not the library had an Internet use policy and if they filtered the Internet. This survey found that almost all the libraries had some kind of policy regulating the use of the Internet (97 percent). In contrast, most of the surveyed libraries indicated they did not filter the Internet (83 percent). Although 27 percent indicated they did filter the Internet, it should be noted that many indicated that the filtering was limited to computers in the children's area only.

In Q21, the librarians were asked if the library was the only place in the community providing free Internet access. Seventy-four percent responded it was, while 16 percent indicated no and 10 percent were not sure.

The last question in this section (Q24) addressed whether or not the Internet had improved library services to the public. Eighty percent indicated it had, while 17 percent were not sure.

The Impact of the Internet on Libraries

In the next section of the survey a series of statements were made about libraries and technology. The intent was to choose statements that were controversial or thought-provoking. The respondents were asked to indicate whether they agreed, disagreed, or were not sure. Table 4 summarizes the results.

Table 4

Statement	Agree	Disagree	Not Sure
Q25. Librarians need to embrace the Internet and make it the focus of their profession	26%	50%	24%
Q26. The Internet has leveled the playing field between small rural libraries and large public libraries. Now everyone has equal access to the same information.	51%	30%	19%

Q27. The Internet has made it easier to provide excellent library services to rural library patrons	77%	9%	14%
Q28. The Internet is changing the small library from a place of learning and education to a place for people to do web surfing, e-mail, chat room, etc (i.e. things unrelated to the traditional roles of the library)	43%	43%	13%

Many of the librarians who participated in the survey did not like Q25. Numerous comments were made to the effect that the Internet is a useful tool or resource but should not be the focus of the profession. One librarian was quick to add after disagreeing with Q25 that "the focus should be our patrons." Likewise, Q26 generated numerous comments. A slim majority (51 percent) agreed that the Internet has leveled the playing field between small and large libraries. However, many commented on the fact that although the Internet has helped narrow the gap it cannot compensate for the additional staff, collections, and funding available at larger libraries. In addition, several commented that the expense of technology has in fact widened the gap as larger libraries can afford more computers and better Internet access.

Profile of Respondents

The final set of questions (Q29-Q32) profiled the respondents with regards to education, age, years of service, and gender. Table 5 summarizes the education data:

Table 5
Highest Level of Education

Degree	Percentage
High School Diploma	17%
Associate Degree	12%
Bachelor's Degree	29%
Master's Degree (other than MLS)	7%
MLS Degree	34%
Doctorate Degree	0% (1 response)

As can be seen from Table 5, the most common response was from those with the MLS degree (34 percent). The overwhelming majority of respondents were

female (92 percent) between the ages of 40-59 (70 percent). The other two age groups (20-39 and 60 and above) were represented equally (15 percent each). In addition, the majority of respondents indicated that they had worked in libraries for more than 10 years. Table 6 summarizes the length of service data.

Table 6
Length of Library Service

Service Time	Percentage
Less than 1 year	4%
1-5 years	19%
6-10 years	18%
More than 10 years	59%

As can be seen from this data, the survey respondents were by and large a very experienced group of librarians.

Discussion

The purpose of this survey was to learn how rural librarians use the Internet and their attitude towards the Internet and its impact on library users and rural libraries. Libraries serving populations of 25,000 or less were chosen. A total of 345 surveys were returned out of a total of 655 mailed for a 53 percent return rate. The majority of respondents were women between the ages of 40-59.

The survey results indicated that rural librarians are making a great deal of use of the Internet. They are using it for a myriad of tasks including collection development, visiting library-related sites, answering reference questions, using library listservs, and doing interlibrary loans. In addition, most of the respondents indicated that they use the Internet for database searching and downloading files. However, the results indicate most rural librarians' knowledge of the Internet does not extend beyond the basics of e-mail and web searching. Most of the librarians stated that they have not created or maintained a web page or done any programming with HTML. In this era of simple web authoring tools such as Netscape Composer and Microsoft Frontpage, all librarians should be familiar with simple web page construction. It is an invaluable skill for librarians to have for creating things such as pathfinders, bibliographies, program schedules, etc.

However, this lack of web authoring skills did not prevent most librarians from indicating that they feel they are keeping pace with the Internet. In fact, most indicated that not only are they keeping up but also that they do not feel overwhelmed by the tremendous amount of information available on the web.

A majority of those surveyed feel positive toward the Internet, indicating they believe it has improved their work environment and also improved their ability to help the public. They see it as a useful tool that can be used to enhance library service but most agreed that providing Internet access should not be the focus of libraries. This finding fits right in with a recent Internet survey by *Library Journal* that found the primary reason most people use the public library is to borrow a book (Fialkoff, 2000).

The next section of the survey focused on how the Internet is affecting rural library patrons. The results indicate the Internet has led to an increase in people using the library and that most librarians feel having the Internet for public use has been well worth the cost. The survey revealed the most common users of the Internet were adults followed by teenagers and children. As for the terminals being used by the public, the survey indicated most rural libraries have an Internet use policy and that most do not filter the Internet.

In addition, the results revealed that most libraries are the sole providers of free Internet access in the community. This again illustrates the vital role that libraries play in their communities. Librarians must make an effort to promote what a "bargain" the American public library really is. It is increasingly becoming one of the only places in America where people can get excellent service and information for free. This survey is another example of that.

But there was some concern among the librarians that the library was changing from a place of learning and education to a place for people to use the Internet for web surfing and e-mail. This trend was recently noted in an *American Libraries* article which stated that public libraries were becoming the number one place for the public to access the Internet outside of home, school, and work (News Fronts, 1998). Given the fact that this article is more than two years old, this researcher would speculate that this trend has continued to grow. This is an issue of great importance for small libraries that are already coping with limited staffing and funding. The challenge, in terms of staff support and money, will be striking a balance between maintaining traditional library services such as story hour, adult programming, bestsellers, videos, CDs, etc. and providing services to those who come to the library only to use the Internet.

Conclusion

The current study attempted to shed some light on the topic of the Internet and its use and impact on rural libraries. The Internet and its associated technology change so rapidly that any study on its use and impact becomes outdated almost immediately. It was because of this that the current study attempted to focus more on attitudes and activities of rural librarians with regard to the Internet.

The current project revealed that the great majority of rural libraries are connected to the Internet and that rural librarians are using the Internet in a myriad of ways. It further showed that rural librarians have a positive attitude towards the Internet and its impact on both their work and on the quality of library service. However, as with any research project the current study produced as many questions as it attempted to answer.

The issue of Internet training was not adequately addressed in the current study. The researcher wonders about the kind and depth of Internet training librarians are receiving. If the results of this survey are any indicator, it appears that librarians are not receiving adequate or in-depth training. Also, continuing education is another area not addressed. In the "Internet Age" one's skills can literally be outdated overnight. The researcher believes it is important for rural librarians to make every effort to stay just ahead of the Internet learning curve of the average citizen. In this way, librarians can make themselves invaluable to the public.

Another area the researcher would like to have examined in more depth was Internet usage among rural library patrons. Exactly how are they using the Internet and what are their information needs? Also, how could library Internet service be improved? And what does the public like and dislike about logging on at the library? These issues could be adequately addressed in a survey of rural library patrons in an effort to improve library service.

Finally, the issue of how the Internet is changing the rural public library demands further attention. One wonders whether libraries are becoming a free public Internet café. Or, on the other hand, has the Internet been a great resource for small public libraries enabling them to better fulfill the traditional roles of the public library? From personal experience it seems to be the case that at many small libraries the Internet stations are frequently in use whereas no one is checking out books or other materials. What does this trend mean for libraries?

Reference List

American Library Directory: Libraries in the United States. (2000). New Providence, NJ: R.R. Bowker.

Bertot, J. C. & McClure, C.R. (2000). Public libraries and the Internet 2000: Summary findings and data tables. Retrieved October 1, 2000 from the World Wide Web: *http://www.nclis.gov/statsurv/2000plo.pdf*

Fialkoff, F. (2000). Where are the books: A study of library and information use ignores libraries' greatest asset. *Library Journal 15*, 54.

Flatley, R. (2000). Characterizing the role of the rural librarian: A survey. *Bookmobile and Outreach Services 3,*(1), 24-43.

Kirriemuir, J. (1999). Informal study of Internet use by UK health sciences librarians. *Online 20.*

News Fronts USA. (1998). Internet use results. *American Libraries 29*, 32.

Scarlett, J. (1997). Internet use of legal information professionals. *The Law Librarian, 28*, 101-6.

U.S. Department of Education, National Center for Educational Statistics. (1998). *Public Libraries in the United States.* Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement.

The purpose of this survey was to determine how librarians in small and rural libraries use the Internet and their attitude towards the Internet and its impact on library users and libraries. Libraries serving populations of 25,000 or less were chosen. A total of 655 surveys were mailed out. Three hundred forty five were analyzed. The majority of respondents were women between the ages of 40-59.

Q1. Does your library have Internet access? Circle answer.

Yes 337 (98%) No 8 (2%)

If Yes, SKIP TO Q3
If No, GO TO Q2

Q2. Why doesn't your library have access to the Internet? Circle one answer.
a. Library cannot afford it.
b. Community and/or Board does not want it.
c. Internet access is readily available to the public elsewhere.
d. Other, please specify _____

SKIP TO Q29

The next set of questions focuses on how you, as a librarian, use the Internet.

Q3. How much time do you spend on the Internet in a typical day? Circle answer.

a. Less than 1 hour.	97 (29%)
b. 1-2 hours.	166 (50%)
c. 3-4 hours.	53 (16%)
d. More than 4 hours.	15 (4%)

Q4. Which of the following things do you use the Internet for at the library? Circle all that apply.

a. E-mail?	Yes 338 (97%)	No 9 (3%)
b. Collection development?	Yes 263 (78%)	No 74 (22%)
c. Copy cataloging?	Yes 145 (43%)	No 192 (57%)
d. Visiting library-related sites for information?	Yes 279 (91%)	No 28 (9%)
e. Answering reference questions using the web?	Yes 309 (92%)	No 28 (8%)
f. Library-related listservs?	Yes 227 (68%)	No 109 (32%)
g. Interlibrary loan?	Yes 229 (68%)	No 106 (32%)
h. Other, please specify _____		

Q5. Please indicate whether you have done the following within the last year: Circle answers.

a. Created a webpage? Yes 103 (31%) No 230 (69%)
b. Maintained and updated library's website? Yes 128 (39%) No 199 (61%)
c. Conducted searches using online databases such as EBSCO host, ProQuest or InfoTrac? Yes 267 (82%) No 60 (18%)
d. Downloaded files from the Internet? Yes 240 (81%) No 81 (25%)
e. Programmed using HTML? Yes 58 (18%) No 273 (82%)

The next set of questions focus on your perceptions of the Internet.

Q6. When it comes to the Internet, would you say you are keeping up or being left behind? Circle answer.

a. Keeping up? 203 (61%)
b. Left behind? 61 (18%)
c. Not sure 69 (21%)

If you answered *left behind* in Q6, why do you think this is so? Circle answer.

a. Don't have enough time to keep up. 57 (60%)
b. Don't have enough knowledge. 26 (28%)
c. Not interested in the Internet. 3 (3%)
d. Not sure? 0
e. Other, please specify : 8 (9%)

Q7. Some people feel overwhelmed with the amount of information available on the Internet. How do you feel? Circle answer.

a. I often feel overwhelmed. 119 (36%)
b. I don't feel overwhelmed. 180 (54%)
c. Not sure. 34 (10%)

Q8. Has your library provided you with any special Internet training (e.g. sent you to a conference or a class)? Circle answer.

a. Yes 274 (82%)
b. No 60 (18%)

Q9. Do you feel that you have the necessary skills to teach people how to use the Internet? Circle answer.

a. Yes 240 (74%)
b. No 41 (12%)
c. Not sure 53 (16%)

Q10. Everyone experiences stress at work. How often does working with the Internet contribute to stress in your job? Circle answer.
a. Very often.   25 (7%)
b. Sometimes.   222 (66%)
c. Not at all.   88 (26%)

Q11. Do you feel having the Internet has made your job: Circle answer.
a. Better.   244 (74%)
b. Worse.   22 (7%)
c. Not much difference.   62 (19%)

Q12. Do you feel the Internet has increased or decreased your ability to help the public? Circle answer.
a. Increased.   318 (95%)
b. Decreased.   3 (1%)
c. Not much difference.   13 (4%)

Q13. Has the Internet significantly changed what you do? Circle answer.
a. Yes   220 (66%)
b. No   92 (28%)
c. Not Sure   21 (6%)

Q14. Do you think the Internet is essential for the work you do? Circle answer.
a. Yes   263 (79%)
b. No   48 (14%)
c. Not sure   24 (7%)

Q15. Do you think e-mail is essential for the work you do? Circle answer.
a. Yes   243 (72%)
b. No   71 (21%)
c. Not sure   22 (7%)

Q16. Are you concerned that you might lose your job in the future because of the Internet and advances in technology? Circle answer.
a. Yes   7 (2%)
b. No   306 (91%)
c. Not sure   23 (7%)

The next set of questions focus on how your patrons use the Internet.

Q17. In your opinion, how has the Internet affected the number of people using the library? Circle answer.

    a. Increased. 246 (74%)
    b. Decreased.   19 (6%)
    c. Same.   53 (15%)
    d. Not sure.   16 (5%)

Q18. Do you think fewer people use the library because they get their information at home using the Internet? Circle answer.

    a. Yes   97 (29%)
    b. No   168 (50%)
    c. Not sure   68 (20%)

Q19. Does your library have an Internet use policy? Circle answer.

    a. Yes   326 (97%)
    b. No   9 (3%)

Q20. Does your library filter the Internet? Circle answer.

    a. Yes   58 (27%)
    b. No   279 (83%)

Q21. Is your library the only place in the community providing public Internet access without cost? Circle answer.

    a. Yes   246 (74%)
    b. No   53 (16%)
    c. Not sure 34 (10%)

Q22. Who would you say uses the Internet the most often at your library? Circle answer

    a. Children.   15 (4%)
    b. Teenagers. 99 (31%)
    c. Adults.   198 (63%)
    d. Seniors.   3 (1%)

Q23. Do you feel the Internet is used sufficiently at your library to justify its cost? Circle answer.

    a. Yes   293 (87%)
    b. No   4 (4%)
    c. Not sure. 28 (8%)

Q24. In general, do you feel the Internet has made library service better or worse or about the same? Circle answer.

a. Better? 267 (80%)
b. Worse? 6 (2%)
c. About the same? 59 (17%)

The following statements are about libraries and technology. Please indicate whether you agree or disagree with each statement. Circle answers.

Q25. Librarians need to embrace the Internet and make it the focus of their profession?

a. Agree 86 (26%)
b. Disagree 164 (50%)
c. Not sure 77 (24%)

Q26. The Internet has leveled the playing field between small rural libraries and large public libraries. Now everyone has equal access to the same information?

a. Agree 171 (51%)
b. Disagree 100 (30%)
c. Not Sure 65 (19%)

Q27. The Internet has made it easier to provide excellent library services to rural library patrons.

a. Agree 260 (77%)
b. Disagree 30 (9%)
c. Not Sure 47 (14%)

Q28. The Internet is changing the small library from a place of learning and education to a place for people to do websurfing, email, chat rooms (i.e. things unrelated to the traditional roles of the library)

a. Agree 144 (43%)
b. Disagree 144 (43%)
c. Not Sure 44 (13%)

These final questions are about you.

Q29. What is your highest level of education completed? Circle answer.

a. High school 60 (17%)
b. Associate degree 42 (12%)
c. Bachelor's degree 99 (29%)
d. Master's degree (other than MLS) 25 (7%)
e. Master's degree in Library Science 117 (34%)

Q30. My age is. Please circle range.

    a. 20-39   53 (15%)
    b. 40-59   235 (70%)
    c. 60 or above.   50 (15%)

Q31. Please indicate how many years you have worked as a librarian. Circle answer.

    a. Less than one.   14 (4%)
    b. 1-5   63 (19%)
    c. 6-10   61 (18%)
    d. More than 10. 202 (59%)

Q32. Please indicate your gender. Circle answer.

    a. Female   315 (92%)
    b. Male   28 (8%)