PEASE AWARD

Analysis of Remote Reference Correspondence at a Large Academic Manuscripts Collection

Kristin E. Martin

Abstract

This paper analyzes 595 letter, phone, facsimile, and e-mail correspondence units sent to the Southern Historical Collection and General and Literary Manuscripts (SHC) at the University of North Carolina at Chapel Hill in 1995 and 1999, to observe the effects of providing online holdings information and the increased use of e-mail in reference correspondence. From 1995 to 1999, e-mail became the preferred method of inquiry, more questions came from casual users researching for personal reasons, more users took advantage of online holdings information to shape their reference questions, and the proportion of remote users visiting in person decreased. The paper concludes by suggesting ways for archivists to prepare for new influxes of remote researchers and methods to improve remote reference services.

Since the Society of American Archivists established the Task Force on Archives and Society in the late 1980s, archivists have actively looked for ways to improve access to and increase use of their repositories' holdings. The mission of the task force was to educate the public as to the importance

Kristin E. Martin was awarded the 2000 Theodore Calvin Pease Award for this paper, which was written as a master's paper for Professor Helen Tibbo at the School of Information and Library Science at the University of North Carolina at Chapel Hill. The Pease Award is named for the first editor of the *American Archivist* and is given to the best student paper as judged by the Pease Award Committee chaired by the current editor of the *American Archivist*. The 2000 selection committee consisted of Philip Eppard, Robert Shuster, and Susan Davis. The award was presented in Denver on August 31, 2000 at the 64th annual meeting of the Society of American Archivists.

of archives and to promote their use and importance in everyday life.[1] The emergence of the Internet during the 1980s, and its growth and acceptance by the American public during the 1990s, have created an environment in which archives can now reach much larger audiences than ever before. Until quite recently, users of archival material had to contact a repository to determine whether it held relevant research materials. In the past the researcher would call or write the repository, talk with a curator or archivist, and request detailed finding aids for relevant collections be sent, if available, before determining whether or not to visit the repository. This could be a very lengthy process and one often limited by the availability of an archivist who has subject knowledge of the collection. With the increasing bulk of archival collections, archivists have worked to capture more of this subject knowledge and institutional memory in extensive finding aids rather than having it reside solely with individual archivists. Still, providing these collection descriptions to users has remained a problem.

The emergence of the Internet, particularly the World Wide Web, is now facilitating the dissemination of such documentation to a broad audience. Archivists are providing intellectual access to their collections not only through on-line library catalogs and national bibliographic databases such as OCLC and RLIN, but perhaps most significantly in the form of finding aids mounted directly on repository web sites. As well as increasing access to holdings information, the Internet provides a mechanism by which librarians and archivists can directly provide reference service through electronic mail. This study examines the remote reference correspondence of a large manuscripts repository, the Southern Historical Collection (SHC), in the Manuscripts Department at the University of North Carolina at Chapel Hill (UNC), to discover how reference services and user inquiries are changing in light of new communication technologies.

The Southern Historical Collection was chosen as the manuscripts repository for this case study for two main reasons. First, it has been on the forefront of Internet technology. Almost all of the nearly 4,600 collections within the Southern Historical Collection have records in the UNC online catalog and descriptions of around 4,000 collections are available on the web site of the Manuscripts Department, with the number growing daily.[2] Approximately 1,500 of these descriptions give detailed collection information, and the rest provide overviews. The Manuscripts Department maintains a departmental e-mail address for reference correspondence. The collection was also chosen because of its high rate of use. The Southern Historical Collection is a well-known, established collection, especially for those studying Southern history.

[1] William J. Maher, "The Use of User Studies," *Midwestern Archivist* 9, no. 1 (1986): 15.

[2] The web site for the Manuscripts Department at UNC is <http://www.lib.unc.edu/mss>.

The collection has existed since 1930, with a collecting focus that includes the entire South. Newer divisions in the Manuscripts Department include the General and Literary Manuscripts, the University Archives, and the Southern Folklife Collection. For the fiscal year 1998–1999, the department received 2,476 daily registrants and 5,855 phone calls, facsimiles, letters, and e-mail.[3] In the fiscal year 1999–2000, these numbers increased to 2,626 daily registrants and 8,536 phone calls, facsimiles, letters, and e-mail.[4]

As the use of e-mail and the Internet have increased, there are many questions to consider about how researchers and the public approach repositories and ultimately how they use archival material. For example, does e-mail correspondence differ from traditional reference correspondence? If so, in what ways? How has the availability of holdings information online affected the types of correspondence that archives receive? This study analyzes the reference requests made to the Southern Historical Collection and General and Literary Manuscripts (abbreviated as the Southern Historical Collection, or SHC), comparing data from 1995 and 1999 to test the following hypotheses about possible changes generated by e-mail correspondence and the Internet:

1. E-mail is becoming the dominant method for remote reference correspondence.
2. Users who contact archives through e-mail are more likely than other users to be people surfing the web recreationally and less likely to be serious researchers.
3. The types of questions asked by users have become more specific as more holdings information has become available through on-line catalogs and web pages.
4. The Internet has encouraged a larger variety of users to learn about and contact archives.

Information-Seeking Behavior

Archives, like libraries, have traditionally been materials-centered, not user-centered institutions. In recent decades, however, researchers have examined information seeking from the user's perspective. Though most of these studies are specific to libraries, many of the behaviors examined apply to information seeking in any context, including archives. Robert Taylor, one of the first people to examine information-seeking behavior in libraries, proposes that

[3] Manuscripts Department, University of North Carolina at Chapel Hill, *Annual Report, 1998–1999* (Chapel Hill: University of North Carolina, 1999), available at <http://www.lib.unc.edu/mss/anrep9899.htm>.

[4] Manuscripts Department, University of North Carolina at Chapel Hill, *Annual Report, 1999–2000* (Chapel Hill: University of North Carolina, 1999), available at <http://www.lib.unc.edu/mss/anrep9900.htm>.

users' needs fall into one of four levels: the visceral need, representing the actual need, still unexpressed; the conscious need, where the information need begins to take a mental shape; the formalized need, which provides a qualified and rational statement of need; and the compromised need, where the user recasts the need to fit into the environment.[5] As information workers, archivists and librarians are confronted with the compromised needs of users and must try to uncover the actual need through question negotiation.

The needs of users and the methods they employ to express their needs are shaped by their situation and by intervening variables, including the environment in which they can fulfill their needs, interpersonal dynamics, and demographic and psychological characteristics.[6] Brenda Dervin created a model for information seeking, which she calls "sense-making." The basic model consists of "Situation—Gaps—Uses." The situation is the context in which a person constructs his or her own personal sense and the gaps represent a lack of knowledge in an area or an information need. The user then tries to use new information to fill those gaps and create a newly constructed sense.[7] In a similar vein, Nicholas Belkin theorizes that the search for information is prompted by an "anomaly in the state of knowledge with respect to the problem faced."[8] This anomalous state of knowledge is the equivalent of Taylor's first two levels of information needs. The user seeks information in order to resolve the anomaly.

In empirical studies looking specifically at how users attempt to fulfill their information needs, Carol Kuhlthau discovered six stages of tasks in the information-seeking process: Initiation, Selection, Exploration, Formulation, Collection, and Presentation. The model created by Kuhlthau incorporates three realms: the affective (feeling), cognitive (thoughts), and physical (actions), all of which affect the information search process.[9] In another empirical study of information-seeking behavior, D. Ellis classified seven elements of behavior in the information search process: starting, chaining, browsing, differentiating, monitoring, extracting, verifying, and ending.[10] Compared with Kuhlthau, his elements are not specific stages in the process, but rather features of the search process that can occur at any time, though their names do suggest some logical

[5] Robert S. Taylor, "Question Negotiation and Information-Seeking in Libraries," *College and Research Libraries* 29 (May 1968): 182.

[6] T. D. Wilson, "Models in Information Behaviour Research," *Journal of Documentation* 55 (June 1999): 256.

[7] Brenda Dervin, "An Overview of Sense-Making Research: Concepts, Methods, and Results" (Paper presented at the Annual Meeting of the International Communication Association, Dallas Tex., May, 1983), available at <http://communication.sbs.ohio-state.edu/sense-making/art/artdervin83.html>.

[8] Nicholas J. Belkin, "Anomalous States of Knowledge as a Basis for Information Retrieval," *Canadian Journal of Information Science* 5 (May 1980): 135.

[9] Carol Collier Kuhlthau, *Seeking Meaning. A Process Approach to Library and Information Services.* (Norwood: N.J.: Ablex Publishing, 1993): 35–43.

[10] Wilson, "Models in Information Behaviour Research," 254.

order. Kuhlthau did find that her model for the search process is reiterative, particularly with experienced users, so the two search models are more similar than they might first appear.[11] One other factor that can influence a user's search is attitudes and perceptions of accessibility, which influence a user's choice of information sources.[12] Archives, perhaps considered inaccessible by many people unfamiliar with archival principles of organization, may now be considered accessible because holdings information can be accessed through the Internet.

Examining the information-seeking behaviors of users provides an important background to any study of reference service. The ways that users seek information have a direct effect on reference transactions, remote or in person. Regardless of which model one chooses to accept, archivists and librarians must consider users' situations, the types of information needed to fulfill their needs, and their stage in the information search process in order to better answer reference questions.

Archives and the Internet

User studies pertaining to archives are rare, and unfortunately many studies were completed before information on archival holdings was available online in any quantity.[13] The largest of such studies is Paul Conway's survey of the users of the National Archives.[14] Conway interviewed hundreds of researchers at different reading rooms in the National Archives and analyzed both phone transactions and letter correspondence. He discovered a wide range of reasons why people use the National Archives. The largest category of researchers consisted of people researching for personal reasons, with genealogy being the most popular research activity. Approximately one third of the researchers were new to or had minimal experience with the National Archives.[15] Based on his results, Conway recommends a "partnership" approach to providing access, in which the user can access the tools (such as finding aids and catalog records), but still

[11] Carol Collier Kuhlthau, "Inside the Search Process: Information Seeking from the User's Perspective," *Journal of the American Society of Information Science* 42 (June 1991): 368.

[12] Mary J. Culnan, "The Dimensions of Perceived Accessibility to Information: Implications for the Delivery of Information Systems and Services," *Journal of the American Society for Information Science* 36 (September 1985): 302–308.

[13] Some examples of user studies include: Frederic Miller, "Use Appraisal and Research: A Case Study of Social Historians," *American Archivist* 49 (Fall 1986): 371–92; Nancy McCall and Lisa A. Mix, "Scholarly Returns: Patterns of Research in a Medical Archives," *Archivaria* 41 (Spring 1996): 159–87; Jacqueline Goggin, "The Indirect Approach: A Study of Scholarly Users of Black and Women's Organizational Records in the Library of Congress Manuscripts Division," *Midwestern Archivist* 9, no. 1 (1986): 57–67.

[14] Paul Conway, *Partners in Research: Improving Access to the Nation's Archive* (Pittsburgh: Archives & Museum Informatics, 1994).

[15] Conway, *Partners in Research,* 64–65, 70.

benefits from the mediation of an archivist.[16] Such an approach requires better documentation by archivists through finding aids and inventories of collections and places less emphasis on individual archivists' subject expertise. Conway's partnership approach to access supports the provision of holdings information on the Internet, which allows users to access the tools directly.

To date, studies examining the effects of on-line use have not revealed profound differences in the types of users or in the way that users access archives. Conway, when studying the users of the National Archives in 1990 and 1991, surveyed them on their computer skills, to test whether automation of the catalog would be useful for users. He found that more than two-thirds of users worked with computers at home or at work, and about half of users performed regular searches with an on-line catalog or database, causing Conway to recommend automation.[17] Yet in Megan Philip's 1997 study of users of the University of North Carolina Manuscripts Department, less than 15 percent of researchers reported that they found out about the Manuscripts Department through the on-line catalog (which contained catalog records for the manuscripts collections) and less than 10 percent discovered the department through the World Wide Web (which contained selected finding aids as well as a description of the Manuscripts Department).[18] These researchers, most of whom were associated with an academic institution and half of whom were students, may have been more likely than Conway's user group to rely on professors and peers to discover information about the Manuscripts Department, and thus less likely to explore the World Wide Web or the on-line catalog. The low rates of use of the Internet to discover information about archives may mean that researchers do not use the Internet as an initial information source, but this does not prove that online holdings information is an unimportant source for researchers. It could also be that the Internet was still too new a resource for many researchers, accustomed to other methods of discovery, to take advantage of as a source for archival information.

In 1998 Kathleen Feeney studied how well major commercial web search engines, specifically AltaVista and HotBot, retrieved finding aids posted at the Southern Historical Collection at the University of North Carolina at Chapel Hill.[19] In her searches using subject headings, only 46 of 150 queries brought up finding aids in the first 100 records. Searches on personal names in the collection proved no more successful. Feeney hypothesized that the huge data sets

[16] Conway, *Partners in Research,* 83.

[17] Conway, *Partners in Research,* 77–78.

[18] Megan Philips, "Usage Patterns for Holdings Information Sources at the University of North Carolina at Chapel Hill Manuscripts Department" (master's thesis, University of North Carolina at Chapel Hill, 1997), 25–30.

[19] Kathleen Feeney, "Retrieval of Archival Finding Aids Using World-Wide-Web Search Engines," *American Archivist* 62 (Fall 1999): 206–28.

that the search engines returned and the possibility that the search engines did not index all of the finding aids were responsible for low retrieval rates. She concluded that, at the time of her study, on-line finding aids did not necessarily aid in resource discovery if users searched through commercial search engines. Bibliographic utilities and library catalogs were still the most useful methods of retrieving information about archival collections, at least pending the creation of an on-line clearinghouse of archival finding aids. In a study performed in 2000, Helen Tibbo and Lokman Meho discovered that newer search engines, specifically Google and Fast Search (All the Web), retrieved finding aids much more frequently, particularly with phrase searching.[20] The study, which ran queries searching for four hundred finding aids from twenty-five different repositories, recorded retrievals rates as high as 95 percent when searching for a finding aid using its title and searching through both Google and Fast Search. The search engines retrieved the finding aid web sites within at least the first thirty hits, and usually within the first twenty. Even when performing a general keyword search, the combination search between the two search engines retrieved the finding aids about two-thirds of the time. Obviously, most users will not know titles to archival collections, so the results of the study represent a very optimistic scenario for retrieval, but it still clearly shows a marked improvement in retrieval rates through commercial search engines.

The increasing popularity of the Internet and the World Wide Web may change the nature of reference services and the types of users of archival material. Already many archives are providing services over the Internet, including electronic reference and on-line exhibits. For example, the New York State Archives uses an e-mail reference service that filters questions so that ready-reference questions can be answered quickly.[21] James Edward Cross suggests that using the Internet as a means of providing reference services (such as through electronic mail) may lead to more nontraditional users, and may make users more impatient and less willing to learn how to retrieve materials.[22] Susan Malbin cautions that while new technology can be beneficial, the need for reference work will increase, not decrease, as users struggle to master new technologies and searching techniques.[23] Besides a possible influx of novice users, even more-experienced users may not understand on-line access tools such as MARC records and on-line finding aids, while the increased use of e-mail could swamp archives with reference questions.

[20] Helen R. Tibbo and Lokman I. Meho, "Finding Finding Aids on the World Wide Web," *American Archivist* 64 (Spring/Summer 2001): 61–77.

[21] Thomas J. Ruller, "Open All Night: Using the Internet to Improve Access to Archives," *Reference Librarian* 56 (1997): 161–70.

[22] James Edward Cross, "Archival Reference: State of the Art," *Reference Librarian,* 56 (1997): 5–25.

[23] Susan Malbin, "The Reference Interview in Archival Literature," *College and Research Librarie* 58 (January 1997): 73.

Reference Correspondence through Electronic Mail

Electronic mail as a medium of communication has its own distinctive characteristics. It is a quick and efficient method of exchanging written information. Unlike phone calls or face-to-face communication, e-mail does not provide any aural or visual feedback. Because it is a young method of communication, there are no universal rules of etiquette. Additionally, there are few status or position cues and no regulatory feedback, which can lead to equal access and participation but reduced self-awareness.[24] The speed of e-mail and of the Internet in general can lead users to expect instantaneous responses and encourage them to post messages that they later regret.

E-mail does offer some obvious advantages for reference correspondence in libraries and archives. It provides twenty-four-hour access; it reduces barriers to service, such as allowing shy or proud users to submit their questions electronically rather than approaching the reference desk; it allows for easy referral, with the ability to forward entire questions in their original state; it provides the option to build a database for commonly asked questions; and it is a new technology that allows the library to maintain a fresh and current image.[25] According to Christine Roysdon and Laura Lee Elliot, e-mail allows librarians and archivists to take "a more thoughtful, leisured, and coherent approach to question answering." E-mail can also be handled more efficiently because questions can be answered in batches, and it is not as disturbing to users and coworkers as the telephone.[26]

Electronic mail offers the potential for a remote reference interview, as discussed by Helen Tibbo.[27] Although e-mail lacks the face-to-face aspect of the traditional reference interview, it does allow the archivist to pause and consider a question, so that a more thoughtful and complete answer can be provided. Certainly e-mail serves as a superior method of remote reference compared to traditional letter correspondence, which can be slow and stilted due to the necessary delays in mail delivery. To help create a friendly and responsive environment, Tibbo suggests that archivists send a prompt message of response to notify users that their e-mail was received, and then clarify the question through one or more rounds of open-ended questioning. A follow-up letter will make users feel welcome and will encourage them to use the service again. Finally,

[24] Sara Kiesler, Jane Siegel and Timothy W. McGuire, "Social Psychological Aspects of Computer-Mediated Communication" *American Psychologist,* 39 (October 1984): 1123–34.

[25] Diane L. Fishman, "Managing the Virtual Reference Desk: How to Plan an Effective Reference E-mail System," *Medical Reference Services Quarterly* 17 (Spring 1998): 1–10.

[26] Christine M. Roysdon and Laura Lee Elliott, "Electronic Integration of Library Services through a Campus-Wide Network," *RQ* 28 (Fall 1988): 87–88.

[27] Helen R. Tibbo, "Interviewing Techniques for Remote Reference: Electronic Versus Traditional Environments," *American Archivist* 58 (Summer 1995): 294–310.

the archives can take advantage of information gained through e-mail by creating a file for each client. This file contains contact information, permits archivists to review previous exchanges in order to improve future reference service, and allows for the easy compilation of use statistics.

Eileen G. Abels, interested in the concept of the e-mail reference interview, performed a study at the University of Maryland where student intermediaries worked with clients to answer real reference questions.[28] She notes that certain approaches toward the interview were less than ideal. With a piecemeal approach, responses were not well planned, goals and directions in the messages were not clear, and important pieces of information were forgotten or overlooked. Students who followed the "bombardment" approach sent the first reply to a reference question as a stream of many questions in no particular order. Responses by clients tended to be incomplete and this too caused information to be lost. Students would occasionally make assumptions when the time lag between e-mails grew too great, but these assumptions would not necessarily be correct. The most effective approach was a systematic method in which students returned questions regarding the initial reference question in an organized manner similar to a form. Abels created a form based on the systematic approach, containing three sections: personal data, the subject in question, and the type of information wanted along with the time frame in which the client was working. This form decreased the number of exchanges by allowing basic information to be gathered in the first exchange. Abels concludes that broad requests that require extensive negotiation are better handled in real time than negotiated via e-mail. Roysdon and Elliot also concur that question negotiation through e-mail is slow and frustrating, though both evaluations compare e-mail to personal interaction rather than letter correspondence.[29]

To date, there have been no studies concerning e-mail reference service in archives, but researchers have conducted many studies on the use of e-mail reference service in libraries.[30] A study at the Boston University Medical Center of their e-mail reference service noted that the primary clientele tended to ask ready-reference questions over e-mail but came to the library for more complex information needs.[31] Seventy-five percent of the questions asked through the e-mail reference service originated outside of the primary clientele of the library. These questions tended to be very broad and open-ended, with little accompa-

[28] Eileen G. Abels, "The E-mail Reference Interview," *RQ* 35 (Spring 1996): 345–58.

[29] Roysdon and Elliott, "Electronic Integration of Library Services," 89.

[30] For example, see Lara Bushallow-Wilbur, Gemma De Vinney, and Fritz Whitcomb, "Electronic Mail Reference Service: A Study," *RQ* 35 (Spring 1996): 359–71; Julie Still and Frank Campbell, "Librarian in a Box: The Use of Electronic Mail for Reference," *Reference Services Review* 21 (Spring 1993): 15–18.

[31] Kathleen Schilling-Eccles and Joseph J. Hartzbecker, Jr., "The Use of Electronic Mail at the Reference Desk: Impact of a Computer Mediated Communication Technology on Librarian-Client Interviews," *Medical Reference Services Quarterly* 17 (Winter 1998): 17–27.

nying contextual information, making them difficult to answer through e-mail. It is possible that these people were surfing the Internet, asking their question at any site that seemed appropriate. Ann Bristow studied the use of e-mail reference at Indiana University over a period of years and reported the results in two articles.[32] Use of the reference service nearly tripled over three years, from 330 questions asked in a three-month period during 1991, to 828 questions asked in a three-month period during 1994. Staff members did not find e-mail reference to be a burden, as most questions were of a factual nature, nor was there an overwhelming volume of questions sent, though the number was clearly increasing as more students and staff familiarized themselves with the Internet.

The challenges and effects of e-mail reference service in either libraries or in archives have not been completely realized as of this date. E-mail use has increased rapidly in the past few years, and the library studies discussed here were all performed prior to 1997. It is possible that libraries with low use rates for e-mail reference service have found use to have increased dramatically since that time. The effects of "opening up the door" by providing reference services over the Internet also have not yet been fully explored. This study hopes to shed some light on these questions, though continued research into the effects of the Internet and of e-mail reference correspondence will be required to understand this rapidly expanding and evolving technology.

Description and Methodology

This study examines the remote reference correspondence of the Southern Historical Collection from two different years: 1995, the first year that the Southern Historical Collection had a departmental e-mail address and a home page on the Web; and 1999, the most recent complete year for which correspondence was available. One correspondence file contains all of the letters, facsimiles, printouts of e-mail, and logs of telephone questions that SHC received during a given year. Staff members recorded their responses to the correspondence either through shorthand notes written next to the correspondent's question or by placing an entire copy of the response in the correspondence file.

A systematic sample of every third correspondence unit was taken from each year, yielding 366 usable correspondence units from 1999, and 229 usable units from 1995, for a total of 595 correspondence units. A unit is defined as one exchange between a researcher and the Southern Historical Collection, or multiple exchanges with the same researcher on the same subject. For example, if a researcher wants to find information on several battles of the Civil War,

[32] Ann Bristow, "Academic Reference Service Over Electronic Mail," *College and Research Library News* 53 (November 1992): 631–32, 637; Ann Bristow and Mary Buechley, "Academic Reference Service Over E-mail: An Update," *College and Research Library News* 56 (July/August 1995): 459–62.

and then later writes back that he or she wants more detailed information on a specific battle, that would be classified as one unit with two exchanges. If the researcher writes again asking about plantation life, that would be classified as another unit. If the researcher asks about both the Civil War battles and plantation life in the same letter, however, that would be considered as only one unit, because single exchanges are not broken down into multiple units. If the same correspondent was included in the data set more than once, one of the units was removed, to prevent a single correspondent from having undue weight in the analysis. This occurred only twice in the sample. Once all the data was collected, it was coded and entered into SPSS. The data was then analyzed using Pearson's chi-square test for independent samples. Findings that are called significant have a *p*-value of 0.05 or less using the chi-square test.

Findings

The sample taken from the reference correspondence came from the time periods listed in Table 1. It is not clear why the amount of correspondence dropped during the second half of 1999, but 1999, when taken as a whole, witnessed more than one and one-half times the correspondence of 1995. Whether either half of 1999 was anomalous cannot be ascertained within the limits of this study. The medium in which researchers made initial contact with the archives was divided into letters, phone calls, facsimiles, and e-mail. The use of different methods to contact the archives changed dramatically between 1995 and 1999, with the most significant switch being from letter writing to e-mail (Table 2).

Table 1 Date of Correspondence, by Percent

Date	Percent	Total for Year
1995, Jan.–June	20.3	38.5
1995, July–Dec.	18.2	
1999, Jan.–June	41.2	61.5
1999, July–Dec.	20.3	
TOTAL	100%	100%
	n = 595	n = 595

Table 2 Method of Correspondence, by Percent

Medium	1995	1999	All Years
Letter	66.4	17.2	36.1
Phone	25.8	34.2	30.9
E-mail	3.5	44.8	28.9
Fax	4.4	3.8	4.0
TOTAL	100%	100%	100%
	n = 229	n = 336	n = 595

Whereas letters constituted nearly two-thirds of the correspondence in 1995, by 1999 e-mail increased to encompass nearly half of all of the correspondence, and letters decreased to less than 20 percent. In the future, as e-mail continues to become more common and accepted, it will probably constitute a large majority of the remote reference correspondence.

Purpose of Research

The purpose of research was determined by reading the correspondence and dividing it into four different categories, as outlined by Conway: occupational, personal/recreational, academic, and avocational.[33] Occupational users, which this study terms professional users, perform narrowly defined research tasks for their jobs. Journalists, lawyers, and filmmakers commonly contact archives as part of their professional responsibilities. Personal or recreational users consult archives for narrow self-interested research or simply out of curiosity. (Genealogy is a common research topic.) Academic users perform research of a wider scope, either as students or faculty members of an academic institution. Avocational users perform research with a broad scope but for their own personal interests. Compared with personal users, avocational users research in more depth and are more likely to have their findings published. Despite being located in an academic institution, academic users accounted for only 36 percent of the remote user sample of the Southern Historical Collection, though they formed the largest proportion of users (Table 3). The proportion of personal users increased significantly from 1995 to 1999. The percentage of inquiries from academic users decreased slightly (though the absolute number increased by 30 percent), but the change is not statistically significant. For 96 cases, 59 of them phone calls, the purpose of the research could not be ascertained. The number of unknowns, which are more likely to be personal users

Table 3 Purpose of Research, with Unknowns Removed, by Percent

Purpose	1995	1999	All Years
Personal/Recreational	23.5	31.8	28.5
Academic	39.0	33.8	35.9
Professional	23.5	21.1	22.0
Avocational	14.0	13.4	14.6
TOTAL	100%	100%	100%
	n = 200	n = 299	n = 499

Note: For 29 cases in 1995 and 67 cases in 1999, the purpose of research could not be determined; therefore, these cases have been excluded.

[33] Conway, *Partners in Research,* 50–51.

than any other (personal users are less likely to include background information than other types of users, as discussed later in this paper), could mean that the increase of personal users was even greater than Table 3 indicates.

Different types of researchers prefer different methods of correspondence (Table 4). When examining the sample from 1999, personal users evidence a significant positive correlation with e-mail use. They used e-mail for 61 percent of the queries in the 1999 sample, and also constituted the largest proportion of e-mail users (40%). Academic users were the next largest percentage of e-mail users in the sample (37%), but were not significantly more likely to use e-mail than to write letters in comparison to the other purposes of research, even though e-mail accounted for 54 percent of their correspondence in 1999. Letters requesting permission to use manuscript materials in publication boosted the amount of letter writing for academic users. For all research purposes (except in the case of professional researchers, who preferred phone calls), e-mail was the most frequently used method to contact the archives in 1999.

Type of Request

The type of request focuses on the specific reason why users contacted the Southern Historical Collection and was ascertained by examining the correspondence. The type of request could not be determined in 93 cases, 67 of which were submitted over the telephone. The request types are listed in Table 5, with the unknowns removed. For analysis purposes, the request types were condensed into five categories: general research, genealogical research, and permission to use in publication remain the same; undergraduate, graduate, and primary/secondary school research were placed into the single category of student research; and the rest of the categories were combined into one category of other requests. There is no significant difference between the types of requests asked in 1995 and 1999. Request type is highly correlated with purpose of research (Table 6). Personal users are associated with genealogical requests,

Table 4 Relationship between Purpose of Research and Method of Correspondence in 1999, by Percent

	Personal/ Recreational	Academic	Professional	Avocational	TOTAL
Letter	10.5	23.8	17.5	28.2	n = 56
Phone/Fax	28.4	22.8	57.1	28.2	n = 97
E-mail	61.1	53.5	25.4	43.6	n = 145
TOTAL	100%	100%	100%	100%	
	n = 95	n = 101	n = 63	n = 39	n = 298

Note: For 67 of the cases in 1999, the purpose of research could not be determined; therefore, these cases have been excluded.

Table 5 Request Type by Percent, with Unknowns Removed

Request Type	1995	1999	All Years
General research	38.1	39.3	38.8
Graduate student research	10.7	6.6	8.2
Undergraduate student research	1.5	4.6	3.4
Genealogical research	27.9	26.5	25.6
Primary/Secondary school research	2.0	2.6	2.4
Educational, Exhibits, Documentaries	5.1	5.2	5.2
Permission to publish	10.7	8.2	9.2
Add to own library's holdings	3.0	2.6	2.8
Other	1.0	5.2	3.6
TOTAL	100%	100%	100%
	n = 197	n = 305	n = 502

Note: For 32 cases in 1995 and 61 cases in 1999, the type of request could not be determined; therefore, these cases have been excluded.

Table 6 Relationship between Purpose of Research and Request Type, by Percent

	Personal/ Recreational	Academic	Professional	Avocational	TOTAL
General Research	8.5	42.7	54.5	57.8	n = 180
Student Research	0.0	39.3	0.0	0.0	n = 70
Genealogical Research	83.0	0.0	0.0	25.0	n = 133
Other Requests	7.8	2.8	35.6	7.8	n = 57
Permission to publish	0.7	15.2	9.9	9.4	n = 44
TOTAL	100%	100%	100%	100%	
	n = 141	n = 178	n = 101	n = 64	n = 484

Note: For 111 cases, the request type of and/or purpose of research could not determined; therefore, these cases have been excluded

while academic users are likely to have general research requests, student research requests, and requests for permission to use materials in publication. Professional users are positively correlated with general research subjects and other requests. Avocational users are most likely to inquire on general research subjects and genealogical research. Researchers performing student research used e-mail as the dominant method to submit their inquiry (69%). Although student research requests account for only a small percentage of the total remote reference correspondence, the frequent use of e-mail by younger researchers is an indication that e-mail will become an even more dominant method of reference correspondence in the future.

Object of Inquiry

The object of inquiry provides a way to examine the components of reference questions, in order to reveal the level on which researchers request information. The categories are modified versions of those Maher used in his

study of the records correspondence at the University of Illinois Archives.[34] Categories for object of inquiry are not mutually exclusive. For example, a correspondent could request photocopies of a specific document and then also ask if the Southern Historical Collection carried other materials on that subject. The object of inquiry for that unit includes both specific items and a general subject query. Because a request can relate to more than one type of item, percentages total more than 100 percent (Figure 1).

Subject requests were more prevalent in 1995 than in 1999. This may have occurred because by 1999 remote users were able to view the SHC's web site and search the on-line catalog to narrow their inquiry to a collection, or even to specific items, before contacting the Manuscripts Department, instead of asking a question on a general topic and hoping the archives could supply a list of relevant collections. There was also a significant increase from 1995 to 1999 in the number of inquiries that did not relate to the holdings at the Southern Historical Collection. This too can be attributed, at least in part, to the increased use of the Internet by remote users. Several correspondents appeared to have simply stumbled onto the web site and asked questions that clearly had no relation to a manuscripts repository, such as one student who wanted information on how to transfer to the University of North Carolina.

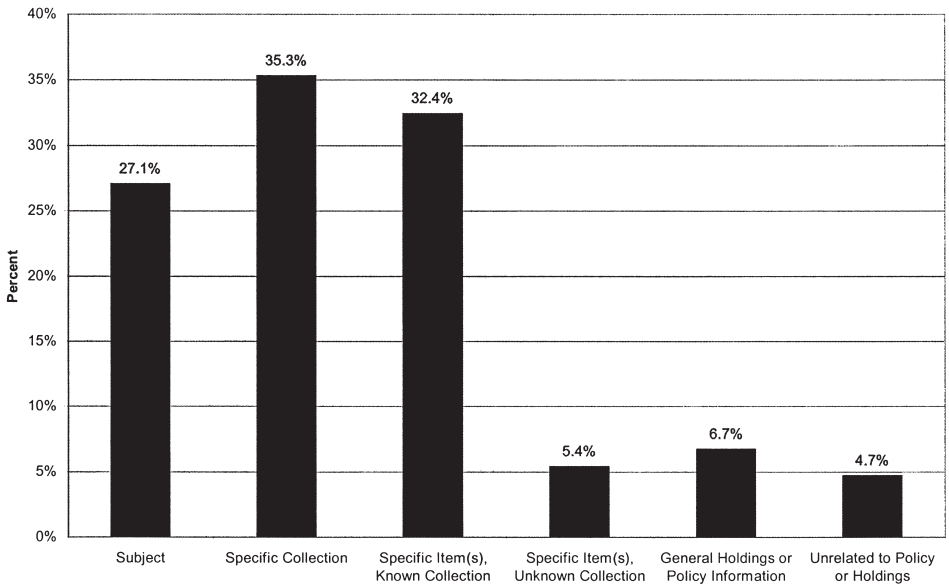

FIGURE 1: Object of Inquiry, Both Years

[34] Maher, "The Use of User Studies," 20–21.

When examining the correlation between purpose of research and object of inquiry, personal users are significantly more likely than other types of users to ask about a subject, less likely to ask for specific known items in the collection, and more likely to inquire about topics unrelated to the archives' holdings or policy information (Table 7). When examining only 1999, there is a positive relationship between personal research and inquiries about specific collections, possibly because the increased use of the Internet has allowed the researchers to choose their collections before contacting the archives.

The relationship between request type and object of inquiry also yields some notable correlations (Table 8). Genealogical research requests tend to be broader than other types of requests, evidencing significant positive correlations with asking questions relating to subjects and collections, but not to specific known items. Genealogists often contacted the Manuscripts Department with the names of their ancestors, hoping to find collections that mentioned these people. If they had collected more background information, they might have begun by asking about specific collections that seemed promising. Student research requests, like genealogical research requests, have a significant positive correlation with subject inquiries. When requests are controlled by year, students' questions and genealogical requests in 1999 are no longer correlated

Table 7 Relationship between Object of Inquiry and Purpose of Research, by Percent

	Personal/ Recreational	Academic	Professional	Avocational	TOTAL
Subject	36.6	30.2	15.5	22.1	n = 138
Collection	40.8	34.1	29.1	30.9	n = 172
Known Item(s)	17.6	38.0	44.5	38.2	n = 168
Unknown Item(s)	2.8	3.4	11.8	2.9	n = 25
General Policy	4.9	10.1	5.5	5.9	n = 35
Not Related	9.2	2.2	0.9	8.8	n = 24
TOTAL	n = 142	n = 179	n = 110	n = 68	

Note: Because the categories are not mutually exclusive, results sum to more than 100%

Table 8 Relationship between Request Type and Object of Inquiry, by Percent

	General Research	Student Research	Genealogical Research	Other	Permission	TOTAL
Subject	29.2	40.0	36.8	8.6	2.2	n = 140
Collection	36.9	28.6	43.6	20.7	32.6	n = 177
Known Item(s)	37.9	31.4	19.5	29.3	60.9	n = 167
Unknown Item(s)	3.6	5.7	2.3	15.5	0.0	n = 23
General Policy	4.6	14.3	5.3	10.3	2.2	n = 33
Unrelated	2.1	1.4	4.5	25.9	2.2	n = 27
TOTAL	n = 195	n = 70	n = 133	n = 58	n = 46	

Note: Because the categories are not mutually exclusive, results sum to more than 100%

with subject inquiries. Instead, both request types become positively correlated with collection requests, further evidence demonstrating the narrowing of the object of inquiry as holdings information available on the Internet increases and as more people become familiar with using the Internet.

Student research requests are the only type of request to display a positive correlation with mentioning the Internet when examining the two years combined. For all correspondence units, mention of the online catalog or of the Web increased significantly from 1995 to 1999, with over one quarter of users mentioning the Internet in 1999, compared with only 4 percent in 1995. (Table 9) For those contacting the archives through e-mail in 1999, 42 percent mention either the Web or the on-line catalog, a significantly higher percentage than for correspondence via telephone or letter. It is likely that much more than one-quarter of the sample had used the Web or on-line catalog, as many correspondents did not mention how they discovered the Southern Historical Collection, or what sources they used to find holdings information.

Response of the Manuscripts Department

To interpret the Southern Historical Collection's response, it is necessary to understand its reference philosophy and method of staffing. Remote users are served on a first-come, first-served basis, with graduate students handling the majority of e-mail reference questions. All questions are analyzed and typically given a reply in less than a week's time. Because of the large volume of remote correspondence, the staff basically answer questions with what information remote researchers provide and do not probe for further clarifying details. Although it can be difficult to ascertain the background of a researcher or even whether the researcher is asking the right questions, the information the researcher initially provides is taken at face value and responses are based on this information. For very vague questions or queries that involve a large amount of materials (especially if the material has not been processed in depth), staff members encourage the researcher to visit the repository in person or hire a private researcher for assistance. With 4,600 collections and 17 million items,

Table 9 Mention of the World Wide Web or Online Catalog, by Percent

	1995	1999	All Years
No	95.6	74.0	82.4
Yes	4.4	26.0	17.6
TOTAL	100%	100%	100%
	n = 229	n = 366	n = 595

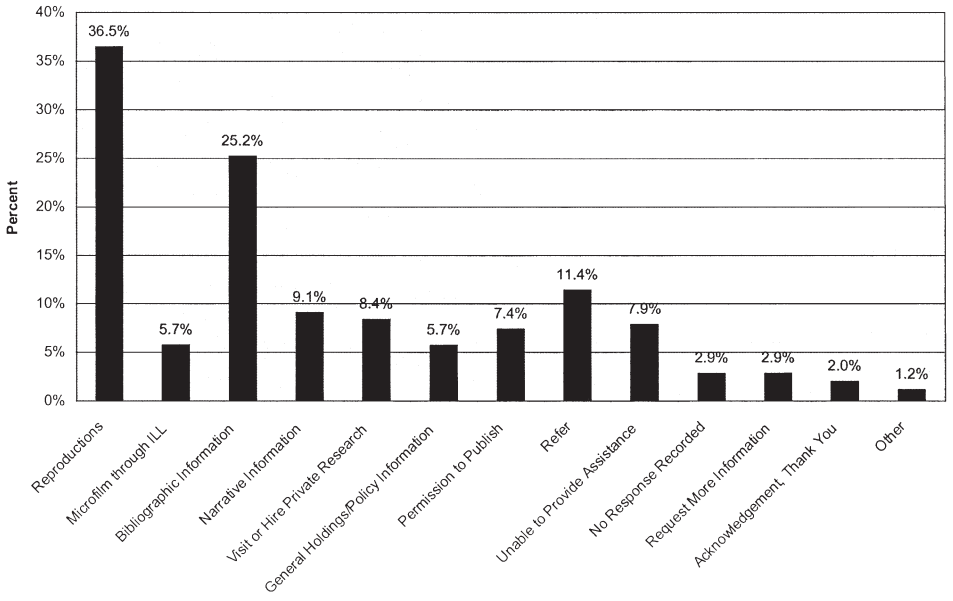

FIGURE 2: Response of the SHC, Both Years

visiting in person may be the best solution.[35] The responses of the Southern Historical Collection (recorded in Figure 2) are divided into non-exclusive categories based partially on categories used by Maher.[36] Responses were similar between the two years.

The response of the Southern Historical Collection is correlated with the medium used to submit an inquiry (Table 10. The last four categories have been eliminated because there were not enough cases to determine correlations). Phone calls and fax inquiries are positively correlated with receiving reproductions or bibliographic information, and those who phone or fax are also significantly less likely to be recommended to visit than those writing either through the mail or electronically. Question negotiation that takes place over the phone allows the SHC to refine the question so that either a finding aid for a collection or actual documents can be sent, making a visit unnecessary. E-mail and letters are less likely than phone calls to receive either bibliographic information or reproductions. E-mail has a significant positive correlation with referrals and suggestions to visit the archives. Broad subject questions asked through e-mail may account for the increased likelihood of a suggestion to visit. The large number of questions asked by e-mail that do not relate to the SHC's holdings or policy information are responsible for the increased likelihood of referral. The Southern Historical Collection is more likely to encour-

[35] Richard Schrader, head of public services at the Southern Historical Collection (now-retired) interview by author, 15 March 2000.

[36] Maher, "The Use of User Studies," 21–22.

Table 10 Relationship between Method of Correspondence and SHC Response, by Percent

	Letter	Phone/Fax	E-mail	TOTAL
Reproductions	32.2	46.4	29.7	n = 217
Microfilm/ILL	7.9	2.9	6.4	n = 34
Bibliographic Information	20.1	37.8	16.3	n = 150
Narrative Information	10.3	8.1	8.7	n = 54
Suggest Visit	10.3	2.9	12.8	n = 50
General Information	4.2	6.2	7.0	n = 34
Permission to Publish	16.4	2.4	2.3	n = 44
Referral	5.6	7.2	23.8	n = 68
Cannot assist	9.3	6.2	8.1	n = 79
TOTAL	n = 214	n = 209	n = 172	

Note: Because the categories are not mutually exclusive, results sum to more than 100%

age personal users to visit, or to refer them to other sources, because personal users prefer e-mail as their medium of communication and tend to ask broader subject questions.

Formality of Inquiries

Formality indicates the amount of background information provided by the user. This information helps staff at the archives to determine the best way to answer the question. In this study, an inquiry was considered formal if it included three pieces of information: a specific request for information, the purpose for which the researcher needed the information, and background information about the researcher. Semiformal inquiries had two of the three pieces of information, and informal inquiries included only a request for information with no context about the request. Because the log sheets were sparse, question formality was not recorded for phone calls unless an additional correspondence medium was used. The formality of the correspondence units declined significantly between the two years. This difference can be attributed to the large increase in e-mail correspondence in 1999, which replaced much of the letter correspondence. Remote users submitting queries through e-mail are much more likely to simply dash out a quick question and hope for a reply, for example, "Please send me any and all information on Civil War." Because the Southern Historical Collection does not usually request more information from users, the typical response to a question of this sort would be to suggest that the researcher come to visit, or to ask the user to narrow the topic and then submit another question. The increase in informality clearly hinders the provision of good reference service. Table 11 provides a breakdown of formality by e-mail and letter. For comparison, the formality of letter correspondence in 1995 is provided, though the difference in formality in letters between 1995 and 1999 is not significant.

Table 11 Formality and Background Information Provided in 1999

Formality	E-mail in 1999	Letters in 1999	Letters in 1995
Informal	26.2	12.7	6.7
Semiformal	59.1	42.9	54.0
Formal	14.6	44.4	59.3
TOTAL	100%	100%	100%
	n = 164	n = 63	n = 152

Table 12 Relationship Between Formality and Purpose of Research, 1999, by Percent

	Personal/ Recreational	Academic	Professional	Avocational	TOTAL
Informal	25.7	15.1	0.0	11.8	n = 36
Semiformal	62.2	54.7	62.2	64.7	n = 143
Formal	12.2	30.2	37.8	23.8	n = 60
TOTAL	100%	100%	100%	100%	
	n = 74	n = 86	n = 45	n = 34	n = 239

Note: For 123 cases question formality and/or purpose of research could not be determined; therefore, these cases have been excluded.

The purpose of research has a stark effect on question formality, particularly in 1999 (Table 12). Personal users are the most likely to be informal and the least likely to be formal. By contrast, professional users nearly always identify the purpose of their research and often provide additional information as well. Personal users are the most likely to be referred or to be invited to visit. They are also the ones most likely to contact the archives via e-mail. There was no significant correlation between formality and personal users in 1995, suggesting that e-mail has been the catalyst for more informal queries to be submitted by personal researchers.

Visiting the Archives

Remote users can make more intensive use of the collection by either requesting materials through the mail or interlibrary loan, or by visiting the collection in person. A large number of researchers come to the Southern Historical Collection, with almost 2,500 registrants visiting the Manuscripts Department during the 1998–1999 fiscal year.[37] The Manuscripts Department requires all visitors and remote users who request photocopies or materials through interlibrary loan to fill out a research agreement. The agreement provides basic information about the user, including name, address, any institutional affiliation, and research topic. The percentage of remote correspondents requesting materials and actually visiting the collection can be tracked through the research agree-

[37] Manuscripts Department, University of North Carolina at Chapel Hill, *Annual Report, 1998–1999.*

ments. Research agreements returned by mail (from those who used materials but never entered the archives) could be differentiated from those filled out in person because they were marked with "mail" in the corner. For correspondence units in 1995, the research agreements two years prior to and two years following 1995 were examined (as well as those in 1995), in order to determine all visits related to the remote correspondence. For correspondence units in 1999, the research agreements for 1999 and the two years prior were examined.

The number of remote correspondents both filling out research agreements and visiting the archives decreased from 1995 to 1999. In 1995, 36 percent of the remote users filled out a research agreement and one-fifth visited the archives. In 1999 only 16 percent of the remote users filled out a research agreement and visitors accounted for less than one of every ten remote correspondents (Table 13). Examination of the research agreements cannot determine how many users decided to pay for private researchers in lieu of their own visits, nor can it reveal cases in which the remote correspondent writing to the archives was not the actual person who made use of the material (as might be the case with a professor who asks a graduate assistant to contact the archives), so the results may be slightly low. The results for 1999 may be slightly low because research agreements for the years following 1999 could not be checked as they were for 1995, but the drop in the number of remote researchers actually visiting the archives is dramatic.

The purpose of research is a strong factor in determining who returns a research agreement and who visits the archives (Table 14). Researchers who contact the archives for personal research have strong negative correlations between both filling out the research agreement and visiting, a relationship that remains significant even when the year is controlled for. Academic and avocational researchers are the most likely to visit and fill out the research agreement, which is true for both years. While personal users may become an increasingly large fraction of remote users, it appears that academic users will continue to be

Table 13 Percent of Remote Users Who Completed a Research Agreement and Visited

	1995	1999	All Years
Research Agreement	35.8	19.7	25.9
Visit	15.7	8.7	11.1
TOTAL	n = 229	n = 366	n = 595

Table 14 Percent of Remote Users Who Completed a Research Agreement and Visited, by Purpose of Research

	Personal/ Recreational	Academic	Professional	Avocational	TOTAL
Research Agreement	15.5	41.3	24.5	42.6	n = 152
Visit	3.5	20.1	9.1	23.5	n = 67
TOTAL	n = 142	n = 179	n = 110	n = 68	

the ones who come to the archives. It is interesting to note that personal users, although they are the least likely to visit, are the ones to whom the archives' staff is most likely to suggest a visit. There is no correlation between inquiries for which the SHC has recommended a visit and those people who do actually visit.

Conclusions

The results of this study support the four original hypotheses. The first hypothesis, that e-mail is becoming the dominant method of correspondence, is supported by the huge shift from letters to e-mail from 1995 to 1999. The fourth hypothesis, that the Internet has increased the variety of users contacting archives, is supported by the findings as well. In examining all of the data gathered through reference correspondence at the Southern Historical Collection, it is impossible to create a profile for a "typical" remote user. The switch to use of e-mail as the near-dominant correspondence medium has led to a large number of users contacting the archives for personal reasons, opening up the archives to a group of researchers that previously was not using it extensively. It is safe to assume that these personal researchers, relying on e-mail, also rely heavily on the Internet for their information sources, given the connection between e-mail correspondence and mention of the Web or the on-line catalog, and given that, prior to the creation of a departmental e-mail address available through the World Wide Web, the Southern Historical Collection received almost no correspondence via e-mail. While the number of other types of researchers increased by about 30 percent from 1995 to 1999, the number of personal users nearly doubled, with most of these users contacting the archives through e-mail. The Southern Historical Collection, though located in an academic institution, clearly attracts questions from users performing all types of research. As the Internet becomes even more commonplace and useful to all researchers, the number and variety of remote questions submitted to the Southern Historical Collection will continue to expand.

The second and third hypotheses are only partially supported by the findings. The third hypothesis, that questions will become more specific with the availability of on-line holdings information, has proven to be the case for student and genealogical research requests, which have narrowed from general subject request to collection-specific inquiries. The number of broad questions posited by novice personal users who stumble upon the web site, however, has provided a counterbalancing force to this tendency. The second hypothesis, that e-mail correspondence is more likely to be from casual users, has been shown to be true with the positive correlation between personal users and e-mail use. Yet academic users and avocational users, who have broader and more scholarly research interests than personal users, correspond through e-mail as well. Personal researchers may generate the largest proportion of e-mail

correspondence, but e-mail is not solely the domain of "Web surfers." Serious researchers also write to the archives electronically.

The data from this study point to several trends for the future:

1. The use of e-mail will continue to grow at the expense of regular mail. While previous studies did not find e-mail reference to be used extensively, this had clearly changed by 1999. The Southern Historical Collection received almost half of its remote correspondence in 1999 in the form of e-mail, and this proportion will probably increase as letter correspondence further decreases. The large percentage of student research requests submitted through e-mail indicates the shift of younger users toward the electronic medium.
2. There is a greater number of researchers contacting archives for their personal research interests than in the past. With the availability of e-mail and the Internet, doors have been opened to those who had never before considered using archives. This means that archivists will field more requests for personal researchers, will receive more requests that would be better directed elsewhere, and simply will receive more requests in general. Comparing the two years of correspondence at the Southern Historical Collection, the number of requests increased by 60 percent. Within the four-year time period, the number of personal users nearly doubled, while the number of requests not related to archival holdings or policy information increased by a factor of six.
3. Many remote users will use the Internet to refine their search before contacting the archives. This trend is evidenced by the narrowing of the types of questions asked by genealogists and students between 1995 and 1999. When looking at 1995 data, these two user groups were likely to contact the archives with general subject questions and expect archives staff to furnish information about the proper collection. In 1999, however, these users had narrowed their requests to specific collections, presumably by using the holdings information available in the on-line library catalog and the Web. Users expect to find holdings information available on the Web.
4. Fewer remote researchers will actually visit the archives than in the past. The absolute number of remote users who visited the archives from the sample in 1995 was greater than the number who visited in 1999, despite the smaller sample in 1995. Less than 10 percent of the 1999 sample visited the Southern Historical Collection in person. The increased number of users contacting the archives for personal research rarely visited the archives; as this number continues to increase the proportion of remote users actually visiting the archives will continue to fall. While academic users may continue to contact archives as a prelude to a visit, archivists cannot assume this to be true for all remote users; many will intend to perform all of their work remotely.

5. Remote users will likely not provide the archives with enough information when submitting queries. The level of formality and background information provided by users dropped significantly between 1995 and 1999, with one or two sentence queries occurring with regularity in the e-mail correspondence. E-mail is a written form of communication, but is treated more like oral communication and is correspondingly less formal.

Implications

Librarians and archivists should not sit idly by and simply observe these transformations. Institutions should expect increased demands for remote reference, even if not immediately. The increase in e-mail may necessitate new staffing patterns or even new positions. Questions submitted to the archives via e-mail should be treated with the same level of care and detail as those submitted through other means.

Archives can save time in responding to e-mail requests by creating electronic copies of form letters and photocopy request forms that currently exist only on paper. Creating templates to respond to e-mail requests, as many archives already have for letter correspondence, saves time in typing responses and provides a way to ensure that all questions are answered in a similar fashion, with no relevant information omitted. Additionally, storing e-mail in an electronic database as well as storing a printout permits old reference questions to be reviewed quickly if similar questions are repeated by many researchers, and allows for the review of researcher information if the same user asks several questions over a period of time. The database provides a place for storing remote users' contact information and facilitates the generation of statistics and the analysis of reference questions.[38] More e-mail correspondence may mean that more time is needed to answer questions, but the ways suggested here to take advantage of the electronic format would increase efficiency and offset some of the extra work.

The increased variety of users who discover archives through web sites creates another set of challenges. If a repository's web site represents a user's first exposure to the archives, the web site must provide information about the archives and its mission in order to orient first-time users. The repository should also give experienced users a valuable overview of the collections to help them decide if the archives' collections fit their research interests. Web sites can be used to target specific types of users. For example, staff members at the Southern Historical Collection know that academic researchers, genealogists,

[38] Tibbo, "Interviewing Techniques for Remote Reference," 307.

professionals working on documentaries, and students performing archival research for the first time all contact the archives. The SHC could create separate introductory pages for these different users, highlighting relevant collections and providing group-specific instructional information. These pages will guide users through the web site and help them filter through information. It may not require too much effort if the archives already has information for specific researchers available in pamphlets, which could simply be adapted for the web site.

The Web presents a new avenue to reach users who previously could not or would not use archives, but it also generates new expectations from users. Users have high expectations for what can be accomplished from remote locations. Rather than insist that all users try to visit their archives in person, archivists should use their web sites as a way to facilitate remote access. The Southern Historical Collection aids remote users by making holdings information available online. Although simply browsing the online holdings information may not provide the researcher with as much information as visiting the collection would, it can help the researcher determine whether a visit would be worthwhile or whether the work can be done remotely. The importance of technical processing and subject access becomes even stronger when holdings information or actual collections are available remotely.

Additionally, as expectations for remote service increase, users will become less willing to visit the collection in person. Recommending that researchers visit if at all possible typically does not result in these people visiting the repository, it simply means that users are leaving the reference exchange with their needs unfulfilled. Some questions may be too large to be answered by anything other than a visit, but other questions might be answerable remotely if archivists solicit more information from the users. Because users are not likely to provide more information without some prompting, archivists need to encourage users to provide more information when they submit their initial query. A form provided on the archives' home page would be one way to accomplish this. Rather than allowing users to click on the departmental e-mail address and send a one-line question, a Web-based form asking for specific information would force users to stop and consider their questions more carefully, as well as provide valuable background information that would allow archivists to answer the question more effectively. The design for the web form could be a modified version of the one described by Abels.[39] The form should be complete enough to gather essential data, but not so large that its length or questions discourage use. Even a simple statement requesting information could make a large difference without seeming pushy: "Please tell us your request. Any information you can provide about the purpose of your research and your background will assist us in

[39] Abels, "The E-mail Reference Interview," 357–58.

answering your question promptly and thoroughly. Thank you." Any way to get researchers to provide more initial information will make remote reference exchanges more productive. Since the initial writing of this paper, the Manuscripts Department at UNC has added a new reference inquiry form to its web page, available at <http://www.lib.unc.edu/mss/mailref.html>.

As more users contact archives remotely and expect all of their dealings to be remote, archivists should take advantage of the potential for at least a limited reference interview via e-mail. As this study shows, users come from all backgrounds and have all types of questions, so assumptions about background or research needs cannot be made with any reliability. Additionally, archivists need to understand users' situations with regard to their information need and their experiences in the search process, as shown by Dervin and Kuhlthau, respectively. The large and ever increasing number of personal researchers will require more patience and instruction from archivists. Unfortunately, these personal users (who prefer to send informal e-mail messages) are the ones least likely to provide contextual information to aid archivists in answering their questions. Without proper question negotiation with remote users, many questions may not be answered adequately. While a full-scale remote reference interview may not be feasible, some question negotiation with researchers can lead to more fruitful exchanges and may help to convince researchers that a personal visit may indeed be the best option. Each archives must decide how much time and energy can be expended in aiding remote users, but a little extra time and effort spent in question negotiation could make a large difference in satisfying the needs of remote users.

Users should be at the heart of every archives and library, and e-mail and the Internet have served to make the world smaller, allowing these institutions to serve a broader user base. This study provides a profile of the types of remote users contacting one archival institution, as well as a look at how e-mail and the Internet have changed reference correspondence. It has only revealed the tip of the iceberg in examining how new technologies will change the ways that archival material is researched and used. The future of such rapidly changing technology cannot be predicted with much certainty, but the information provided here can help archivists and librarians anticipate new directions in remote research and better serve their users.