Electronic mail communications in a Technical University Library

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Over the last 25 years librarians have increasingly used automation to improve the efficiency and the effectiveness of the work we do. Librarians use a common format (MARC) to share bibliographic information. We expedite interlibrary loans through utilities like OCLC or RLG. We have developed integrated library systems to replace card catalogs, paper order files, and manual circulation systems. From a theoretical management point of view, most of these changes represent the first order of technological change--changes that make it possible for us to do our traditional jobs better and/or faster. We may change some of the things we do, but the products remain the same.

Today, librarians, especially those in technical university libraries, are using automation to move quickly into the second order of technological change--where the fundamental nature of library work changes as we begin to provide new information products that respond more directly to user needs. An example might be the use of Gophers and the World Wide Web to create virtual libraries of primary, numerical, and graphic data so essential to science. In the past, our tools have not been adequate to provide this information at desired levels of detail or output. These new products make it possible to customize information to the point that we can meet specific individual needs, not only for information, but format as well.

Another example is the growing digitization of images to create electronic files of material as diverse as library catalogs, music scores, and photographs. This also represents a new way of organizing and delivering information to our users--the
traditional library goal. To adopt these new technologies, libraries must make fundamental changes in operation and communication patterns so that the librarians will have the time and initiative to master and deliver new technologies.

In an article in the fall, 1994 issue of *Cause/Effect*, Sara Kiesier points out that there are four organizational mechanisms to foster collaboration and innovation:

1. interdepartmental committees;
2. rotation of personnel;
3. cross-functional project teams (TQM) and
4. computer networking through electronic mail. These are the key organizational tools that library administrators have to change the operation of library services to take advantage of automated environments.

Today, I want to share some empirical research that we have carried out on the last method of change, electronic mail, at the New Mexico State University Library. This research was undertaken to determine how librarians could take advantage of electronic mail (email) to communicate more effectively in an automated environment delivering a new set of electronic library resources.

The NMSU Library contains 930,000 volumes in the cataloged collections, 440,000 government documents, and a significant collection of manuscript and photographic material. We receive 7,000 serials titles.

Last year we had 1.4 million searches of our electronic catalog and, in six months, 40,000 searches of a new LAN. Almost half of our students participate in bibliographic instruction each year. In 1992, the Library occupied a second building and increased staff by 20 percent.

At the same time, we became the first unit at the New Mexico State University where every employee has electronic mail. From the beginning, we knew that electronic mail was essential to overcome chronically slow mail systems and coordinate work between the two buildings. We set up individual addresses as well as groups, reflecting the
existing departmental and committee structures. We trained each staff member extensively and encouraged daily use by issuing most documentation on email.

We also allowed the staff to experiment with new communication patterns and techniques, to see how email could improve our ability to deliver information. Many of the experiments were positive. For example, a group worked together electronically to bring up and maintain our gopher. Staff notices on email quickly became routine. Other experiments were less positive and several disciplinary actions had to be taken for abuse.

After a year of email use, we carried out an empirical study to identify and encourage responsible use, to identify privacy issues that needed to be addressed, and to increase organizational effectiveness. The study was carried out by Blaine Goss and Ken Hacker, members of the faculty in the Department of Communications, with help from Valerie Horton, Head of Library Systems, and myself. The study process involved five steps common to social science research:

- interviews - to determine important issues
- questionnaires - to obtain input from each employee
- focus groups - to interpret questionnaire results
- large group meetings - to feedback study findings and to discuss draft guidelines
- guidelines - to implement findings throughout the organization

The study process was also intended to encourage organization development by involving library personnel throughout the process and encouraging consensus building. Library staff identified six key functions for using email at New Mexico State University. Some of these are old functions that have been automated. Others are entirely new to the library environment:

- email is used in the place of the telephone to leave brief, person to person messages like instructions or reference questions.
email is now the principal means of making announcements, sending memos, and sharing minutes of meetings. We have reduced the use of paper significantly.

we use email to share many documents we receive from outside the library. Often, we share a listserv or email message from a colleague located at another institution.

we find that email allows us to contact others at a time of their convenience. Library personnel report that the quality of response is often improved because the respondent is devoting full attention to it.

we know that electronic mail is faster than paper mail. In an emergency, I can call a meeting with only a day’s notice. I also know that this must happen rarely as it disrupts the schedules of our staff.

finally, email has enabled us to create electronic committees, committees which meet most, or all the time, electronically and asynchronously. Asynchronous communication changes the dynamics of work and how people contribute. And, users must learn a whole new set of interaction techniques to excel.

To identify the main uses of email, we carried out a factor analysis of each variable in the study. We found that three factors have statistical significance for email users. From an empirical point of view, these factors are the most important findings of the study.

Our major finding is that the staff uses email to improve communication and increase productivity. By participating in internal and external email, the staff knows much more about what is going on in their area of work and is in a better position to apply it. The Latin American Bibliographer, for example, used email to monitor and disseminate information on the recent Chiapas and peso crises in Mexico to the 40 faculty at NMSU who regularly work with Mexico. As a result, the University is in a better position to work effectively in Mexico.

Second, the staff feel that email helps to keep them in touch. We find this very important now that we operate in two buildings. The reference librarians, for example,
think that email is essential to maintaining an interdependent 80 hour per week desk schedule in two locations. Email is also heavily used to support professional linkages with personnel at other libraries. Often committee work is done, and difficult reference questions are answered, with the help of email.

Third, the librarians feel email is critical for assuring that policy issues are discussed in full. Since the librarians are faculty members at New Mexico State University, our governance is very participative. Electronic mail allows us to share ideas and debate issues. As a result, there is a much clearer understanding of policy and agreement on its implementation.

In terms of addressing the goals of the study, the staff recorded that:

- Email is being used responsibly. Abuse is minimal.
- Email does increase organizational effectiveness. The staff have identified a number of ways to use email to increase their productivity, particularly sharing information and meeting asynchronously.
- When training is provided (and training is essential) staff respect sensitive issues related to privacy.

After completion of the study the Library Administrative Council discussed how to apply the study’s findings. We decided to adopt a set of consensual guidelines that have five points (Appendix):

- We are making suggestions for effective use, not rules. There will be good reasons from time to time to operate outside the guidelines. But most of the time, we will operate within them.
- We do affirm privacy rights and responsible use. While the status of email messages, if ambiguous in U.S. courts, it is the intent of the library administration to assure first amendment rights of privacy for all email messages.
- As a group, the staff finds email effective and encourages its use throughout the library.
we also find that the bulk of email messages are professional in nature. We believe that the tax payers of New Mexico are well served by our email system. We think our guidelines are consistent with established policies and intellectual freedom principles of the American Library Association.

In closing, I want to say that the NMSU Library has adopted email comprehensively. Email has changed not only the way we do our jobs, but the nature of our work as well. It permits a quantum leap in library services in the automated environment that we are trying to achieve.
Appendix

Guidelines for using electronic mail NMSU Library 1/94

This statement represents the opinions of electronic mail (email) users at NMSU Library concerning guidelines for using email. These principles are not intended to be laws or even rules, but are rather suggestions for effective use of email. We also understand that the establishment of such guidelines does not provide formal, legal protection to NMSU employees.

In the spirit of the *U.S. Constitution*, the American Library Association *Library Bill of Rights*, and EDUCOM’s¹ *Bill of Rights and Responsibilities for the Electronic Community of Learners* the NMSU Library fully supports intellectual freedom and freedom of speech. Concurrent with the previous rights, each network user has responsibilities to all other citizens of the electronic community. These responsibilities are 1. to respect and value the right of privacy for all, 2. to recognize and respect the diversity of the population and opinions in the community, and 3. to behave ethically. Empirical research indicates that email is an effective communication tool which should not be heavily regulated. Further, email enhances productivity by making available unique information resources. Finally, we believe that universal access to email should be made available to the entire NMSU community.

In light of the above, we strongly encourage users of email to recognize that:

1. NMSU Library PC Usage Policy already states "all email messages and computer files are considered private and confidential and should be treated in the same manner as materials in a person's desk".

¹ EDUCOM is a nonprofit consortium of higher education institutions dedicated to fostering information technology.
2. Effective use of email is best realized when:
   a. It is used primarily for professional exchanges.
   b. Users respect the dignity of all email users, remembering that nothing should be written in a message that could not be comfortably said in public.
   c. Because email can be easily forwarded, reproduced, or mis-sent, users must understand that confidentiality cannot be assured.
   d. If there is a possibility of confusion, users should indicate in their messages whether they are speaking for themselves or for the Library and/or University.
   e. Finally, we believe that given the rapidly growing technology and the need for information dissemination, training in the use of electronic communication should be an ongoing concern, worthy of adequate funding.

Reference