

Academic Use of Electronic Publications in Social Sciences and Humanities and Changing Roles for Libraries

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ABSTRACT

Results of a faculty survey show that there is significant interest in electronic publication of research and that the library can play an important role in the venture. This research project identified perceived obstacles to electronic publishing in the Humanities and Social Sciences and also addressed questions of computing infrastructure and other institutional support for electronic publication of faculty research.

Introduction

Technology, and particularly the Internet, has great potential for altering scholarly communication and research in social sciences and humanities. This paper describes some faculty perceptions of current problems associated with the use of electronic publications and perceived obstacles to their extended use for scholarly communication and publication. It analyzes results of a research project during the academic year of 1995/96 based on a survey of faculty at University of Southern California.

The purpose of my research proposal, Academic Research Use of Electronic Publications in Social Sciences and Humanities, was to gauge the current use of, and attitudes towards, electronic publishing of research by USC faculty in humanities and social sciences. The primary focus was to see how faculty use of electronic publications might affect their interest in publishing their own research in electronic formats.

Methodology

The method used was a two part local survey of approximately 300 full time faculty in Humanities and Social Science departments in the College of Letters, Arts and Sciences and the Annenberg School of Communications. USC is a large AAU research university with enrollment of approximately 28,000. In terms of federally funded research, it is among the top ten in the country.

The first part of the survey consisted of a written questionnaire designed to provide a basis for quantitative analysis. The second part consisted of a set of interview questions designed as follow-up from the questionnaires to provide a basis for a qualitative analysis of faculty attitudes towards electronic publishing. The goal was to identify faculty who had an interest in the topic and were willing to participate in interviews for qualitative analysis, rather than to collect a large, statistically significant set of data. This survey differed from a library user survey in that it emphasized faculty attitudes towards the impact of electronic publishing on their research and their perceptions about potential roles for the library, rather than their use of the library. The method was to create one written questionnaire for all faculty, then to use quantitative data to determine if different sets of questions for different disciplines would be needed for the qualitative analysis. This one page questionnaire consisted of nine multiple choice questions, intended to take five minutes to fill out, thus increasing the likelihood that faculty would return it.

For the second part of the survey all faculty who returned questionnaires were contacted by phone or email and asked if they would consent to thirty minute interviews. I designed a database to input data from both parts of the survey, using a database management software, Filemaker Pro 2.1.

Results

Part 1: Quantitative & Qualitative Analysis

Fifty eight written questionnaires were returned, representing a 19% response rate. The survey set covers sixteen departments or schools, eight from social sciences disciplines and eight from humanities disciplines. Of respondents contacted for interviews, thirty-three were willing to be interviewed, 57% of those who returned questionnaires. Responses to the questionnaire are enumerated below:

1. On the question of whether they have used full text scholarly electronic publications in their disciplines, 15% checked frequently, 48% checked sometimes, and 37% checked never. Adding the first two responses together, a total of 63% indicated some use of electronic publications.
2. On the question about how they find out about electronic publications, which allowed for multiple responses, 57% checked colleagues, 29% checked graduate students, 9% checked seminars and 32% checked other and specified such means as academic listservs and professional publications. Seminars, checked by the smallest percentage, were the only sources connected with the library or university computing.
3. On the question of whether electronic publications will be important to research in their areas in the next five years, 24% checked very important, 50% checked somewhat, 20% checked not important, and 6% left this blank. Adding the first two responses together, 74% indicated they believe electronic publications will be important to their fields.
4. On the question of access to equipment, peripherals and software in office or home, 34% indicated that they have ready access and make regular use of it for electronic research or publishing, 39% indicated that they had access to equipment but did not make regular use of it, 22% indicated that they do not have access to equipment but would like to use it, and only 5% checked that they had no interest.
5. On the question of whether they have published electronically, 95% checked never, 4% checked sometimes, and 1% checked frequently.
6. On the question of whether they expect to be involved in electronic media projects in the near future, 14% responded frequently, 59% responded sometime, 17% responded never, and 10% left this blank or wrote in that they did not know. Adding the first two responses, 73% indicated they believe they will be involved in electronic projects.
7. On the question about perceived obstacles to publishing, which allowed for multiple responses, 50% checked copyright, 57% checked lack of peer review, 34% checked preservation and access to electronic publications, and 15% checked other.
8. On the question about whether they currently use public computer workstations for research, 29% checked library, 14% checked university computing labs, and 7% checked other workstations, while 50% did not answer this question or wrote in answers such as "no".
9. In response to a question asking if they would use equipment and software if the library made it available for future faculty projects 12% responded frequently, 53% responded sometimes, 21% answered never, and 14% left this blank or wrote in answers such as "possibly" or "very little". Adding the first two responses

together, 65% indicated some interest in using the library for some sort of electronic publishing projects.

The second part of the survey consisted of interviews, lasting from thirty minutes to two hours each. The first question concerned current use of electronic publications and faculty indicated that the types of electronic publications used for research were primarily statistical data, government publications, and national and international trade or business information, and working paper archives. They also subscribed to electronic book reviews or full-text electronic journals such as Migration News, Perspectives on Central Asia, Journal of Computer-Mediated Communication. A few used electronic news publications, such as the Chronicle of Higher Education, for general information related to scholarship, and some commented that while commercial publishers did not offer the journals they need electronically, the publishers' websites were useful for the table of contents, instructions to authors and information on contacting editors. The most cited research use of textual electronic information was communication with scholars through listservs and professional bulletin boards in both Humanities and Social Sciences. Some faculty used for research electronically published information from organizations such as ACLU, National Coalition to Abolish the Death Penalty, Communication Institute for Online Scholarship, and Speech Communication Association.

Faculty were asked to elaborate on how they see electronic publishing developing in their fields in five years. Responses ranged from seeing it as the wave of the future to seeing too many obstacles to expect major changes in the next five years. Several faculty see CD-ROM as a preferred medium of distribution of full-text and multimedia historical and literary materials. Many faculty projected that electronic peer reviewed journals will be the first development and the most useful for their research. Most faculty do not expect to see or want to read electronic books online. One type of electronic book they would consider assigning to students is textbooks on demand, as either full-text or supplemental materials. When they were asked what electronic projects they are now involved in, faculty provided examples such as development of department or course web pages, publishing their own working papers, and peer reviewed electronic journals.

When asked what sorts of electronic publishing projects interest them, faculty responses varied from specialized research projects that could be published in a multimedia format, to going along with a trend to publish in an electronic journal if the editorial boards are distinguished or the journals are already established in print. For instance, faculty members who read electronic book review journals, also publish reviews in these journals. Some faculty are involved in electronic projects through research labs or see themselves publishing short electronic monographs and conference proceedings. A fair number see themselves eventually publishing electronically for instruction. A few did not see themselves publishing electronically, even if the university established an electronic press. The primary perceived obstacle to publishing research electronically for the majority of faculty is lack of peer review. The second most important obstacle was copyright.

There did not seem to be much difference between Humanities and Social Science faculty concerning perceived variables affecting their decision to publish electronically. Most believe that department support, including financial support and proliferation of electronic publications in their research areas, was important. A number of respondents said that age tended to be related to comfort with technology and that these were important variables. Most faculty believed gender was not important in an academic setting. A few mentioned gender as an important variable, but primarily connected to age, noting that most older faculty are male. Faculty opinions were fairly evenly split on whether they believed recognition from university administration/peer review committees and tenure versus non-tenure were important. Other variables that faculty mentioned as somewhat important were a supportive infrastructure, student expectations of faculty, a need for better retrieval search engines for publishing networked information on the World Wide Web.

Part 2: Profiles by Discipline

The data set is statistically too small to analyze meaningfully by individual departments, but some broad comparisons can be made between disciplines in Humanities and Social Sciences. Humanities respondents represented departments of English, Religion, Linguistics, Slavic, German, Spanish, Classics and Philosophy. Humanities faculty use of full text electronic publications appears to be in line with the general survey group. Humanities faculty find out about electronic publications slightly more through colleagues and slightly less through graduate students than indicated by the general survey group. Responses to a question about the importance of electronic publishing in the future parallel the survey group, though the percentage who responded it was not important was slightly higher. Most faculty have access to equipment, though a slightly lower percentage than indicated by the general survey group. Responses to questions about current and projected involvement in electronic publications reflect the survey group. Perceived obstacles were the same as for the survey group as a whole, except for copyright, which was checked by 36% of Humanities faculty compared to 50% of the general survey group. A slightly higher percentage than the general survey group indicated they currently use the library or did not use public workstations at all. Projected use of library equipment for electronic publishing for Humanities deviated most from the survey group: 5% indicated frequently, compared to 29% for the survey, 64% indicated sometimes, compared to 53% for the survey, 9% indicated never, compared to 21% for the survey, and 22% left this blank or wrote in answers.

Faculty responses from disciplines in Social Sciences represented departments of Anthropology, Communications, History, International Relations, Political Science, Psychology, and Sociology. Answers to the question about their current use of electronic publications closely paralleled the percentages for the survey group. Responses indicating electronic publications would be somewhat important for their research were 41% for Social Sciences, compared to 50% for the survey group, and responses that it would not be important were 12%, compared to 20% for the total. Ready access to equipment and expectations for involvement in electronic projects paralleled the survey group. Perceived obstacles to electronic publication closely paralleled the survey group for copyright and preservation and access to electronic publications. Lack of peer review was indicated by 67% compared to 57% of the total survey. Responses to current and projected use of public workstations for research parallels the survey group.

Discussion

Part 1: Need for Research on Scholarly Electronic Publishing

When I began the project, I found little library literature directly related to the level of use of electronic publications by researchers in social sciences and humanities. Most surveys and studies of electronic publishing and electronic texts such as hypertext systems evaluated either specific resources or the publishing industry as a whole. Library literature concerning the Information Highway or on the Internet was primarily focused on networked information and issues such as access, cost, evaluations of new resources and policies. Some more recent literature addressed the types of electronic resources used by scholars in humanities, but not social sciences, and discussed issues related to electronic journals.

The response rate for this survey was a good one for surveys of this type, and the self-selection most likely represents those faculty at USC who are interested in this topic in the near future. While a few had electronic publishing projects already in mind, most felt they needed more information or did not really understand what electronic publishing meant, particularly with regard to the Internet.

One of my expectations before carrying out the survey was that there would be a connection between research use of full text electronic publications and interest in using library facilities for future electronic projects. On this point, the highest correlation was between those faculty who indicated that they sometimes

use electronic publications and also indicated that they would sometimes use library equipment if it were made available in the future; in addition half of those who answered that they never use electronic publications indicated that they would sometimes use library equipment if it were made available.

Another expectation was that faculty who use electronic publications now would be interested in publishing their own research electronically. Of those faculty who checked they frequently or sometimes use electronic publications, most also indicated they would frequently or sometimes expect to be involved in electronic projects. Another 25% of the survey group indicated that they had never used electronic publications but expected to be involved in electronic projects in the future. Of the faculty who indicated they expected to sometimes be involved in electronic projects, 31% indicated they would sometimes use the library for such projects.

Many faculty indicated that they prefer to work at home or in their offices to working in a library setting. Most faculty reacted favorably to the idea of having remote access to major electronic journals in their fields of research, but many experience difficulties acquiring and maintaining appropriate hardware, software, and network capabilities. Very few indicated that they expect to read even short articles or working papers online, so printing was a major concern. A number of faculty interviewed were waiting for the time when core prestigious journals in the field would be available electronically before they would publish electronically. Timeliness was frequently cited as one of the biggest benefits to electronic publishing.

Part 2: Changing Roles for Libraries

Research results from local surveys may provide a basis for planning of programs and services by the library, including the possibility of development of collaborative programs between library faculty and academic faculty. Currently the distribution of scholarly and scientific publications is primarily determined by the prestige of the publisher or publication. With the possibility of universities and scholarly publishers establishing electronic presses, libraries have a chance to be proactive.

There was a general perception in this survey group that the library can be an agent of cross-disciplinary pollination, at least as to electronic publication formats and opportunities. They would foresee consulting the library regarding incorporating technology into instruction, particularly development of course web pages, and for technical expertise about a variety of electronic resources. However, while many faculty in this survey viewed the World Wide Web as useful for scholarly communication, they did not see great potential for research. I developed in response to faculty requests for more information about using the Internet for research a series of multidisciplinary seminars for fields of Communications, Psychology, Sociology, International Relations, Religion, and Medieval and Renaissance Studies. These seminars were co-presented with other library faculty and provided a forum to discuss research concerns of importance to faculty. For instance, in areas of scholarship where the original images or scripts are important, digitized representations may suffice for instruction when the original is not readily available, but not for research, when scholars may prefer to travel to have access to the original material.

In addition to outreach to faculty regarding potential for electronic publications in research, libraries can provide staff to solve these technical problems or work on collaborative arrangements with university computer services to provide consulting.

Faculty appear to be very aware of their dual roles as producers and consumers of scholarly communication. Their concern about lack of peer review for the current electronic journals will be diminished if major academic publishers electronically publish core research journals. However, many faculty mentioned cost recovery and copyright as potential obstacles. They want protection as producers of scholarship, and also want to control costs for instructional purposes and want their research to reach the

right readership. Libraries and professional organizations should continue to work to influence pending copyright legislation to ensure access and fair use in these areas and make academic faculty aware this role.

It is clear that there is significant faculty interest in electronic publication of research. This survey group represents faculty who, for the most part, have never published electronically, but approximately 75% of whom expected to be involved in electronic projects in the near future. It also represents academic faculty who perceived the survey as library outreach, which was one reason they returned questionnaires and consented to interviews. I would conclude that many faculty are now looking to the library to take a leadership role in this area and that it is therefore an opportunity for the library to position itself as central to research and publishing in the university.

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