COLLEGE & RESEARCH LIBRARIES

JULY 1993
VOLUME 54
NUMBER 4

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ISSN 0010-0870

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College & Research Libraries (ISSN 0010-0870) is the official journal of the Association of College and Research Libraries, a division of the American Library Association. It is published bi-monthly at 50 E. Huron St., Chicago, IL 60611. Second-class postage paid at Chicago and at additional mailing offices. **POSTMASTER**: Send address changes to College & Research Libraries, 50 E. Huron St., Chicago, IL 60611.

Manuscripts of articles should be sent to the Editor: Gloriana St. Clair, c/o E506 Pattee Library, The Pennsylvania State University Libraries, University Park, PA 16802; 814-865-1858; FAX: 814-863-7293. Copies of books for review should be sent to Stephen Lehmann and Robert Walther, Reference Department, Van Pelt Library 6206, University of Pennsylvania Libraries, Philadelphia, PA 19104.

Advertising office: Stuart M. Foster, Advertising Sales Manager; Dolores L. LaPointe, Advertising Coordinator, *Choice*, 100 Riverview Center, Middletown, CT 06457, 203-347-1387. Production and circulation office: ALA Production Services, 50 E. Huron St., Chicago, IL 60611: Eileen Mahoney; Dianne M. Rooney; Bruce Frausto and Josephine Gibson-Porter; Daniel Lewis and Suzanne Roe; Beverly Thymes; and Donavan Vicha. Change of address and subscription orders should be addressed to *College & Research Libraries*, for receipt at the above address, at least two months before the publication date of the effective issue.

Subscription price: To members of ACRL, $25, included in membership dues; to nonmembers, U.S. $50; Canada and Mexico $55; and other foreign countries $60. Retrospective subscriptions not accepted. Single copies and back issues, $14 each.

Inclusion of an article or advertisement in *College & Research Libraries* does not constitute official endorsement by ACRL or ALA.

A partial list of the services indexing or abstracting the contents of *C&RL* includes: *Current Index to Journals in Education; Information Science Abstracts; Library & Information Science Abstracts; Library Literature*; and *Social Sciences Citation Index*. Book reviews are included in *Book Review Digest, Book Review Index*, and *Current Book Review Citations*.

The paper used in this publication meets the minimum requirements of American National Standard for Information Science—Permanence of Paper for Printed Library Materials, ANSI Z39.48-1984.∞

Guest Editorial

Political Networking

The debate surrounding classroom productivity is heard more and more throughout the country. In my state, Oregon, public debate is couched in general terms of finding sufficient funding for higher education in a time of financial crisis. Private discussion is much more blunt and usually starts with the question "What do they do anyway?" The "they" refers primarily to teaching faculty, but clearly implicates all of us who are a part of higher education. What we have here is a group of people, in this case legislators, who still see teaching as a soft job involving six or seven hours a week in the classroom. Any attempts to explain that six or seven classroom hours per week represent many more hours of preparation falls on deaf ears and is usually too little too late.

This scenario can be repeated with librarians taking the part of the misunderstood faculty and university administrators representing the misunderstanding legislators. The question "What do they do?" is most frequently asked during promotion and tenure discussions as library administrators seek to define the role of library faculty. Anne Beaubien captured it well in a *C&RL* editorial when she noted: "Librarianship has a chronically low profile among the information and education professions because people do not understand the depth and breadth of our expertise or the extent of what we do."[1] I believe librarians should provide political leadership in building this understanding not only about the profession but also about academia as a whole. The common thread in both of the above scenarios is that the realization of the problem—for example, lack of understanding of what we do—almost always happens at a critical moment (budget time). Then any explanation appears to be not an attempt to enlighten but rather an attempt to justify. In other words, those seeking to explain themselves have not been doing their homework. They have not been providing to those with budgetary power complete and continual information on what they do and why they are essential to a healthy economy.

Although it is not news that legislators and university administrators are unaware of the services and benefits provided by those they are funding, it is becoming more and more critical as resources grow scarce. In Oregon, the discussion of faculty productivity is taking place because mandated budget cuts are forcing legislators to scrutinize all aspects of state funding critically. "Doing more with less" is the motto of the day. As legislators seek to make cuts and to eliminate inefficiencies, their gaze turns to higher education. Overall cuts in higher education translate into specific cuts in library budgets.

We have to ask ourselves why this is happening. Is it true that teaching faculty are overpaid and underworked? Is it true that library faculty are not up to par with other faculty vis-à-vis research and publication? If it is not true, why the perception? Certainly, some academics in libraries and classrooms on campus have opted for the status quo. However, I propose that much of the criticism stems from ignorance on the part of those with administrative and/or budgetary responsibility. Neither librarians nor anyone else in higher education has done a successful job of explaining and marketing their services. When measured against funding for police or other "necessities," we come up short. We have not translated what we do into words that make sense to the majority of taxpayers. We have not marketed ourselves or our services. We have assumed that those in charge value us as much as we value ourselves.

While the situation for the world of academia as a whole is severe, for libraries it is almost catastrophic. Library schools continue to close because they are perceived as not in tune with the research and teaching mission of the university. Nor, parenthetically, do they attract large donor dollars. The profession itself is greying, and budgets are declining while the need for new monies is more critical than ever. The increasing entry of private corporations into the information world (especially the electronic information world), along with the now proverbial information explosion, are causing libraries to reexamine what they do and where they should go. The *vision thing*, as it is sometimes called, is sweeping the library profession. There is a growing need to redefine the profession and to do so in a way that makes sense to us who are in it; and to those we want to be in it; and to those who will ultimately be supporting it.

I propose that although we must continue to work within the profession to define our changing role, we must spend equal time outside the profession making ourselves a part of the economic status quo. Particularly, we must get more involved in the political process of the cities and counties in which we live. I use the term *political process* in its broadest aspects to include all types of networking and coalition building with those individuals and groups who can affect legislative and economic change.

In Oregon, we have seen librarians and other library supporters mount a successful campaign against an anti-Gay rights initiative by creating alliances with like-minded groups. Critical support of a local legislator who was in a close election race resulted in his coauthoring, sponsoring, and shepherding through the legislature major legislation for Oregon libraries. I am convinced that when he put out the eleventh-hour call for help and when seven of the ten who showed up to help were librarians, he understood that librarians wielded political clout.

However, the political arena, although critical, is only one avenue for networking. Participating in local civic affairs, working in service organizations, joining organizations other than library organizations, attending local, state, and national conferences that are not primarily related to libraries, and publishing in journals from outside our profession are all methods for marketing libraries and library services. The goal is to become a part of the decision-making process—not simply to react to it.

All of this is not to suggest that we neglect networking on campus, but we must recognize that the very institutions of which we are a part and fromwhich we would normally seek support are themselves in trouble. Indeed, I propose that librarians take the lead on our campuses in terms of coalition building. We could be the model for the rest of the academy. Because of our ability to access information quickly and efficiently, we are in a position to provide service and information to local, state, and national leaders. Building support and visibility through political and community activism is the key component for ensuring that future legislators will never need to ask the question "What do they do?"

KARYLE BUTCHER,
Oregon State University

REFERENCE

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Scholarly Publication, Academic Libraries, and the Assumption That These Processes Are Really under Management Control

Herbert White

It has long been assumed that the refereeing process used by scholarly journals served as an effective safeguard against the publication of work that is either inferior or repetitive of earlier publications. However, the tremendous increase in publication volume that cannot be reconciled with the number of scholars undertaking and reporting their research suggests that the process has developed cracks, if indeed it has not broken down completely. Pressures to publish everything "somewhere" not only protect the most significant journals but also channel the remaining articles into lesser journals, which are equally protected directly by the researchers forced to publish in them, even if they are reluctant to do so. This phenomenon also negates publishing on demand or electronic storage and retention as effective alternatives. Libraries are increasingly important to publishers because studies have shown that the nonlibrary purchasing base for scholarly journals continues to erode, while libraries are constantly pressured with regard to what they are supposed to buy. In addition, scholars often play the simultaneous and conflicting roles of author, reviewer, editor, reader, academic credit dispenser, and credit recipient. This paper suggests the need for new and more objective approaches to the "publication situation," rather than merely obeying the dictates of the marketplace and the "credit machine."

The article makes no attempt at a complete survey of the literature on this topic, a literature with contributions from both librarians and publishers, and one that is growing rapidly. Much of this literature is narrowly self-justifying, and it has been addressed in this paper only as necessary to document its own assessments.

THE PRESUMED VALIDITY OF SCHOLARLY PEER ASSESSMENT OF PUBLICATION WORTHINESS

Throughout recorded history, scholars, scientists, musicians, and artists have struggled for the freedom to set their own work agendas and to be judged by groups of their own peers rather than by outsiders. They have understood that evaluation either by a political body or by funding patrons might impose a value system of "political correctness," or one that simply rewards what interests and appeals to the patron and sponsor. Examples of this have ranged from the forced recanting of Galileo of what he knew to be true to more recent examples of politically acceptable music, with the determination made through the application of inexplicable and arbi-

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trary standards we still do not understand.

The attitude of scholars has been consistently that they and only they should be the judges of what represents quality work, and that the decision should be made by the evaluation of peers in the scholar's own discipline. It is the scholarly argument that this judgment, and not the opinion of bureaucratic officials, should determine what is worthwhile and should be published.

It is possible that celebrities in areas of scholarship and research are required to spend much of their time talking and writing about what they have already done, and therefore have little time to do anything new.

Scholars, who insist on the premise that their own judgment of the work of colleagues is both fair and impartial, implement this process through the mechanism of peer review. This review occurs both in the determination of who should receive support and funding for carrying out his or her research, and in a refereeing process that controls publication in leading journals. From the start, it has been evident that this procedure, while perhaps preferable to any identified alternative, works at best uncertainly. Recently questions have arisen about how well it works at all.

THE ELITISM OF THE PROCESS

It has been a long time since Derek de Solla Price first noted the existence of the invisible college, an informal network of scholars that bypasses both the rigor and the time constraints of the formal review and communication processes. The invisible college has both supporters and critics, and largely this depends on whether the individual making the judgment sees himself or herself as a member of the invisible college.[1] There can be little doubt that the process of informal and immediate communication, supported by electronic message systems, works well for those who are already recognized by their peers as legitimate scholars. It does not work nearly so well for the newcomers who have yet to achieve such status. In other words, it recognizes and credits *past* achievement in preference to the present work presumably being communicated and evaluated. It tends to be a historical rather than an up-to-date evaluative tool. And yet there are countless indications that suggest, for example in the areas of the physical and biological sciences (although a case could be made equally easily for poetry and music), that most of the breakthroughs later seen as significant are made by newcomers, and these contributions are not quickly recognized precisely because they come from individuals from whom such contributions were not expected. It is possible that celebrities in areas of scholarship and research are required to spend much of their time talking and writing about what they have already done, and therefore have little time to do anything new. That was the complaint of the developers of DNA. The invisible college, certainly prominent long before Price named it, works to some extent, but it works unfairly and inefficiently because it judges not the new specific contribution but the reputation that the individual currently holds. To place a contextual setting on an old joke: Where do Nobel Prize recipients publish? Anywhere they like!

The same sort of prejudging bias has been leveled, at least in the United States, against panels that award research funds. In principle, the process is supposed to focus on the proposed project, and not on the qualifications of the investigator that relate to previous work that may be irrelevant to this effort. However, panels are composed of human beings, and human beings frequently prefer to make safe rather than risky decisions. The opportunity for criticizing (with totally clear hindsight) the decision of an award jury, which did not use criteria that led to productive results, is always available. The criticism must be muted when it is noted that the past work of the applicant gave every indication of future success. Giving more money to former recipients is a safer decision. And that is why such panels look at citation statistics for earlier work by the same individual—sometimes claiming that past achievement predicts future success.

WHY RESEARCHERS MUST PUBLISH

There is obviously a connection between funding support and the generation of the scholarly and research publications on which this paper focuses, but that connection is not as direct as one might assume. The purpose of publication is, after all, a twofold one. The first and the most immediately recognized purpose is the communication of findings, sometimes to an eager audience and sometimes to a disinterested one. The former is preferable, but even the latter is acceptable, because the other purpose of scholarly publication is the achievement of academic credit. Unfortunately, as will be discussed below, credit depends less on the quality and more on the quantity of activity in today's academic marketplace. Studies at the University of Pittsburgh indicated that much material that resides in research libraries is never read.[2] My own earlier studies indicated that for whole categories of disciplines, libraries were the only subscribers to certain journals. These studies suggest a situation in which scholarly publications are read by nobody and are of interest to nobody.[3] Does that negate their value? To society perhaps, but not necessarily to the author.

The premise of quality control in the evaluation of submissions to scholarly journals is based on the concept of double-blind refereeing—the author does not know who the reviewers are, and the reviewer does not know who the author is. The process might work for the author, but it works ineffectively for the reviewers. To a large extent the same preconceptions that affect the invisible college and the awarding of grants apply here as well. Many scholarly communities are small; specialties of members are well-known to all possible peer reviewers.

While there are still major interdisciplinary journals, the process of journal publication has become narrower and more specialized. Much of this trend developed with the entry of commercial publishers into the arena of publishing scholarly and research journals. Early studies indicated that scholarly journal publishing was a field dominated by the for-profit sector and by professional societies, with the second group largely emphasizing discipline-wide publications fitting the characteristics of the society membership.[4]

THE ECONOMICS OF JOURNAL PUBLISHING

The development of narrow, specialized journals owes its impetus to many sources, but the economic opportunities were grasped perhaps most directly by Robert Maxwell and his development of new journals for Pergamon Press. Maxwell clearly saw one obvious but rarely discussed difference between monograph and journal publishing. Monographic publication involves a great deal of cash flow investment and risk. Monographs must be contracted, edited, and printed, and a supply must be placed into the warehouse before the first copy can be sold. The publisher has invested in an expensive inventory, and then must play a highly dangerous game. Unsold copies, particularly concerning subjects for which information changes rapidly, have virtually no value. This fact discourages massive speculative print runs. However, it also eliminates the likelihood of huge profits, since successful monographs rapidly go out of print. The publisher has then made what is probably a modest profit, but consequently faces a new and dangerous business decision of whether to reprint. If so, how many copies? Might this decision lead to the additional expense of yet another reprint? Or, might the publisher be burdened with an unsold and useless inventory? It might be better to look for an updated work instead, perhaps through a second or revised edition, or through another author. These are some of the difficult choices facing monograph publishers.

Journal publishers face far fewer risks. They receive payment for the entire subscription year (and sometimes for multiple years) before making any expenditures. Those funds, even if cautiously invested, produce interest income, in contrast to the interest expenses that monographic publishers face. Print runs are known well in advance, and the publisher has few responsibilities for maintaining back sets, particularly if these are available on microfilm. Unsuccessfully promoted titles can be aborted, sometimes before the first issue is printed, and it may not even be necessary to offer a refund. There is always the potential option of suggesting that the funds already contributed be diverted to other titles offered by the same publisher. That strategy was described in a presentation and subsequently in an article submitted to the scholarly publishing community itself. The members of the community expressed little dispute or disagreement with the conclusions presented.[5]

The mechanisms so carefully developed by Maxwell and others depended not on developing and publishing large-circulation, inclusive-topic journals, but rather on promoting highly focused publications. These journals are so specialized that they often have only one or two interested readers in any major university. Publishers can bring out these journals infrequently (quarterly, at the most) and they can charge high subscription rates to university libraries because the targeted reader considers these highly specialized journals to be more important than any other. Consequently it has become nearly impossible for university libraries to refuse to subscribe to key journals aimed at specific scholars and researchers whom the library serves.

The publication process described above thus created a whole series of invisible colleges, i.e., small groups of researchers working in a particular subdiscipline or even subsubdiscipline. Key members of each invisible college are identified and selected to be editors of journals or members of the editorial advisory board. These appointments engender a great deal of prestige but often very little work responsibility. New and junior researchers anxious to join this small and select group feel pressured to write articles for these journals in order to establish their professional credibility.

In this way, the anonymity of double blind refereeing is weakened if not totally destroyed. The smaller and more specialized the field, the easier it becomes to recognize the researcher, if not through the work itself, then certainly through the references contained in the article. Moreover, while the entry of commercial publishers into the arena of scholarly journal publishing did not in and of itself decrease the quality of what was being published, it placed the emphasis primarily upon quantity. It is not necessary to adhere to a rigid page budget for the year if it is possible to use an increase in the number of pages as a rationale for an increase in subscription price. The authors, editors, and referees who determine the content of scholarly journals are not expected to buy the journals. That is left to libraries, and their funding is separate from either the salary or research budget of the scholar. Moreover, libraries have been, up to now, more likely to absorb the rising costs of subscriptions without protest.

WHY THE PROCESS WORKS FOR AUTHORS AND PUBLISHERS

It is not my intent to suggest that authors and editors set about willfully to dilute the quality of research publications by increasing their quantity. It is possible that some unscrupulous publisher might be tempted to do this, but even that conjecture, if offered, could only be substantiated with difficulty. It is nevertheless clear that the publications resulting from the work of scholars have grown far more rapidly than the number of scholars themselves. People are writing more and more, but not necessarily because they have more to say.

Part of the explanation for the increase in publication has already been suggested. Neither authors, editors, nor referees have any financial responsibility for their decisions. While the content of scholarly journals is controlled by these groups, financial arrangements involve only the publisher and the organization that pays for the subscription—most frequently the library. Research shows that libraries have not found an effective way, in their institutional settings, to combat the pressures of increasing page counts and higher prices.[6] These two factors may be related, as indeed some publishers' statistics claim they are. However, for the bill-paying librarian this does not matter, since librarians have never asked for either new or larger journals.

The smaller and more specialized the field, the easier it becomes to recognize the researcher, if not through the work itself, then certainly through the references contained in the article.

Originally, the refereeing process was intended to weed out and destroy proposed articles that did not warrant publication, either because the material was repetitive or because it added nothing new. However, a recent study indicated that at least some publishers are willing to publish material even though they know it is not original.[7] They do it because of the pressure to fill their issues. However, they also do it to keep the article, particularly if written by a prominent or easily recognized author, from going to another journal, or perhaps contributing to the formation of a competing journal. Editors, therefore, feel some responsibility for including everything worth publishing in their discipline in their own journal because they don't want to encourage competition. As libraries increasingly face the prospect of canceling subscriptions (although budgeters tend to put off this decision as long as they possibly can by transferring funds from other internal priorities), the existence of a rival journal becomes of greater concern to the editor and publisher than the notion that some articles might not have warranted inclusion in the first place.

Why is all this happening? I suggest it is largely because the process of academic evaluation, as practiced primarily in universities through the promotion and tenure procedures, has moved gradually from emphasis on the quality of a scholar's publications to concern with the quantity of the work. This has happened because the sheer volume and specificity of dossiers overwhelms the ability of those from other disciplines to understand and evaluate the content. With the readiness of publishers to start new journals (statistics indicate that carefully planned journals—at least carefully planned in identifying their intended audience—rarely fail), the process of refereeing in the journal literature does not succeed in keeping articles from being published, only in shifting them from journal A to journal B, or perhaps even to journal C. Journal C then becomes a crucial journal for the scholar whose article will appear there, and it becomes politically essential that the library purchase it as a validation of the research. The pressure to purchase C becomes paradoxically greater than the pressure to purchase A, because A will be purchased in any case. It has already been shown that, to a far greater extent than those involved would like to admit, libraries base cancellation decisions less on careful evaluation of need, and more significantly on what they can get away with canceling.[8]

POSSIBLE SOLUTIONS AND CHANGES

If there is a solution to this dilemma, it rests squarely with the academicians and scholars themselves, because it is ultimately they, and not librarians, who influence the actions of publishers. To a large extent librarians are seen only as purchasing agents with money, but with little say in what they are expected to buy. It is certainly also to the advantage of publishers, as for any vendor, to sell as much as possible at the highest possible price. Probably relatively few publishers act with such a cold single-minded approach to maximizing profits, but enough publishers do conduct business in such a way as to seriously damage the credibility of the larger publishing community.

The solution to this dilemma must come from the recognition by scholars themselves that the present system—dispensing credit based on the quantity of publications by a given author—ultimately does not benefit the academic community. Attempts to measure quality will always be controversial and disputatious, and there is no certainty that any new system will please more people or produce fairer results. As long as humans are doing the judging there will be charges of bias, and letting computers do the judging antiseptically is something we are not prepared to do. For many individuals, their entire career futures are at stake.

Yet, despite all of these caveats, it should be recognized that the present system emphasizing quantity of publication must change. It encourages irresponsible and needless publication, which deluges the reader with huge amounts of material. Any operations researcher can tell us that it is easier to find what we need in a small collection than in a large one, provided that there is confidence that the smaller collection contains what is needed. In other words, redundant information is not just trivial waste. It can get in the way of finding the important and useful. This is the first reason for the necessity to change the current system of scholarly publication.

The second reason for changing the system is that given the finite and even decreasing support of library funding, the present approach of unlimited and unmonitored growth will bankrupt the academic information process. If the current system does not do this, it will at least have drained off so many resources from other needs and other priorities in the academic enterprise that the results will be equally catastrophic.

Research scholars are emerging who understand this issue and who recognize that the solution does not lie in finding more money (at best a dubious prospect) but in developing a new system of evaluating and crediting quality. Publishers do not necessarily see these scholars as friendly to the interests of the publishing community, and some have sought to intimidate these scholars into silence by dragging them through costly and time-consuming legal processes. However, librarians certainly should see these scholars as allies, and offer them all the help and encouragement that we can.

Nevertheless, it would probably be unrealistic to expect that either faculty or academic administrators will address this problem until and unless they absolutely have to do so. Actions such as those undertaken by the Faculty Senate at Southern Methodist University (SMU), which threatened to punish those publishers "guilty" of the greatest price increases by canceling these subscriptions regardless of qualitative and other political considerations, are still very much the exception rather than the rule, and as long as that situation continues, neither publishers nor academicians will feel any pressure to respond to the problem. In a perverse way, the willingness and remarkable ability of academic librarians to somehow find the money with which to meet continuing double-digit publisher price increases virtually assures that nothing will be done. We were even paid what was intended as a compliment in a recent article by Timothy King, a publisher who congratulated librarians on their resourcefulness in finding the necessary money for publications.[9]

STRATEGIES FOR LIBRARIANS

What strategies and alternatives does this situation suggest for academic librarians? The first is the recognition that they cannot solve the problem because they lack the power and leverage. Publishers will not be motivated to take action as long as they are supported by a faculty who exercise much authority over but take little responsibility for the issues in academic publishing. Some publishers even patiently explain to librarians that the reason for the large rise in the price of subscriptions is because of an increase in submitted articles, or of the weakness of the U.S. dollar. In a free-market economy, those are their problems and not ours. It appears certain that university administrators will make a concerted effort not when librarians demand it, but when faculty demand it. Economists predict that prices are not likely to rise substantially in the stores where we shop because customers have no money. Manufacturers and vendors know that, and therefore know that they cannot increase prices. Librarians do not have any money either, but that makes very little difference to vendors. If vendors perceive librarians as purchasing agents rather than as customers, they have little motivation to respond to librarians' financial limitations. Therefore, the well-meaning suggestion in the recent article by Bruce Kingma and Philip Eppard does not offer any solution.[10] Kingma and Eppard correctly describe the difference between individual and library subscription prices, but their suggestion that the economic solution is to increase the cost of faculty photocopying services for library journals neglects the reality we know so well, that when photocopying is made unattractive, "direct appropriation of material" or mutilation grow in proportion. These authors maintain that whatever emerges into the scholarly publication process was worth publishing, or at least that the process cannot be changed. I would rather not be that pessimistic.

What, then, is the academic librarians' most effective strategy? We must state loudly and clearly that this disaster of ever-increasing periodical prices is neither our fault nor our problem, and that we have no solution we can implement. The available options include increased funding of the periodical budget from already scarce university funds, an accelerated process of cancellations, or an academic power structure commitment to do something about an absurd pricing growth that has connection neither to inflation nor to the number of scholars presumed to have something to report in the literature. Academic administrators will do something about this problem if they become convinced it is important enough to warrant concerted action, just as they finally felt impelled to deal with the escalating cost, confusion, and embarrassment of their athletic programs. Dare we suggest to them that this might be just as important?

Utilizing this sort of confrontational strategy is difficult and painful for librarians because our acceptance of the "moral imperative" (the premise that we must do everything with or without resources or it will all be our fault) appears to be an inbred value system that students already bring with them to library school without having to be taught.[11] Where they acquire this virus I am not sure. Perhaps they learn this commitment to self-sacrifice from their mentors in the libraries in which so many students already work on a part-time basis.

One thing, however, seems certain to me. The unchecked bloodletting of the periodicals budget has perhaps gained librarians some additional funds, even if not nearly enough. But it has also removed the initiative for doing many of the other things we should be doing (automation, resource sharing, preservation, increased reference and bibliographic work, staff upgrading, and continuing education) because all the money is already allocated before we get to any of these priorities. To increase the irony, academic administrators truly believe that they have been financially supportive of their libraries, when in fact they have only really been supportive of a pass-through financial game in the continuation of a process sadly in need of evaluation and refinement. We need to stress that periodicals funding is not our only priority, and at this point we can't even allow it to be our primary priority.

SOME FINAL THOUGHTS

Articles such as this one are written at some risk of creating displeasure. The habit of executing the messenger who brings us bad tidings goes back a long way. There are academic library administrators who would prefer not to be reminded of how ineffective our strategies of the last twenty years have been. There may be other administrators who truly believe that progress is being made, and that there is light at the end of the tunnel. However, these optimists may confuse increased activity with progress. There has been an increasing number of meetings between publisher and librarian groups. Publishers may be inclined to talk as long as nothing changes while the talks go on. There has certainly been no modification in the price escalation of scholarly journals, and we can be certain there will be none as long as some publishers continue to suggest that this is our problem instead of theirs.

Meetings between librarians and groups of faculty members have also become more frequent, and some have been useful if only to explain the magnitude of the problem. However, while there have been some scattered reports of motions of concern expressed by various faculty bodies, and even vague threats of retribution, such scattered activities will not make an impression on the journal pricing process. What might make an impression would be a vote by the membership of an entire professional subject discipline to refuse to submit articles to particularly high-priced journals, or concrete action by a body of presidents representing major research institutions, such as the Ivy League or the Big Ten. There is no indication of such action on the horizon, and more talk provides a poor substitute.

There is also the hope that acceptance of concepts implementing what has been called the *virtual library* can offer some relief. Broadly based concepts of resource sharing are indeed very exciting, and it is important that they be pursued. However, they offer no relief for this particular problem unless institutions are prepared to divert funds from purchase of materials to a resource-sharing mechanism. Such action, if seriously contemplated, would probably require modification of present copyright legislation, particularly in light of recent narrow court interpretations of Section 107 of the U.S. Copyright Act of 1976. Such modification would not be impossible, but it is not likely to occur in the near future. Faculty and administrators presently understand the virtual library to be a means of sharing resources *after* librarians have already spent every last available dollar on purchase, and subsequently found that the resources are inadequate. Under such constraints virtual library concepts are still worthwhile, but they require much more additional spending. If the need for even more funding has been communicated to any university administrators, they appear to pay it little heed. And yet, somebody has to explain to them that libraries cannot continue to spend every last cent on material purchase and then *also* implement virtual libraries. Funds must be diverted from purchase, or new funds must be added. Faculty don't like the first option and university administrators don't like the second.

Librarians have been entangled in this web for the last twenty years, and extricating ourselves is a difficult task. The situation puts me in mind of advice from my college varsity tennis coach, many years ago. "Never change a winning game, but always change a losing game. You risk nothing when you do." How many sets do we have to lose before we reassess our strategies?

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Publication in *College & Research Libraries*: Accepted, Rejected, and Published Papers, 1980–1991

Peter Hernon, Allen Smith, and Mary Bailey Croxen

The authors examine characteristics of authorship, editorial decisions, and reviewer assessments for accepted and rejected papers for College & Research Libraries (C&RL) *based on over a decade of internal records (private correspondence and reviewer assessments) made available to them. Noting the wider literature dealing with publishing in refereed journals, this study makes comparisons to that literature and suggests directions for future research. The authors found that* C&RL *editors and reviewers conducted their work without major disagreement or rancor. Refereeing has indeed served the journal's readership well.*

The published research studying reviewer assessments and editors' letters of decision in scholarly journals tends to be dated. Also, it has neither examined a scholarly journal within library and information science nor spanned more than a few years. The studies have considered one aspect of the editorial or publication process and have not compared accepted and rejected manuscripts according to the following seven variables:

- The characteristics of authorship
- The extent of reviewer agreement
- The nature of reviewer comments
- The length of time in reaching an editorial decision
- The impact of author complaints
- The standards to which a manuscript is held
- The extent to which the submission is double-blind reviewed.

The purpose of the present analysis is to examine these variables for *College & Research Libraries* (*C&RL*) during an eleven-year period.[1] More specifically, the study addresses questions such as:

- What major criticisms have reviewers made?
- Have the editors and reviewers made suggestions to enable rejected authors to seek publication elsewhere?
- Have many of the rejected papers appeared elsewhere, and if published, where?
- What groups of individuals—by position and affiliation—account for the acceptance and rejection rates?
- How many individuals outside the discipline of library and information science have submitted papers to the journal?
- What is the extent of collaborative authorship?
- What topical areas appear among rejected papers?

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- Is there a strict adherence to a blind-reviewing process?
- How promptly is an editorial decision rendered?
- To what extent do reviewers concur on their assessments of papers, and how do editors vote when reviewers disagree?
- To what extent do editorial board members conduct the assessments?

The material made available to the authors provided an opportunity to study these questions for accepted and rejected manuscripts.

Peer review has been the subject of extensive analysis within the scholarly literature.

Answers to these questions provide insights into the publication activity of the leading scholarly journal on academic librarianship during three editorships, and suggest the extent to which *C&RL* conforms to the findings of previous research within and without the field of library and information science. Clearly, this is an excellent opportunity to learn more about the peer review process, over time, and about ways to investigate that process. At the same time, the study complements research that has profiled the published papers appearing in the journal and offers suggestions for those seeking publication.[2]

LITERATURE REVIEW

Publishing Characteristics

Published research has profiled the authorship characteristics (gender, occupation, and geographic distribution) of scholarly articles that have appeared in library and information science journals, probing the extent of balance or "possible publication bias" concerning gender and other characteristics.[3,4] These studies, however, did not examine the refereeing process and the pool of rejected manuscripts to determine whether there is a statistically significant difference between the characteristics of rejected and published authors. Previous to this study, there was only the important reminder of Gloria J. Zamora and Martha C. Adamson: "An analysis of authorship characteristics solely based on the information provided by the typical library science journal is inherently risky." "Some author information," they note, may "be sketchy, inconsistent, and/or incomplete."[5]

Confining their examination to academic librarians, John M. Budd and Charles A. Seavey studied the characteristics of journal authorship and identified the most productive librarians and institutions, and general publication requirements or expectations of selected institutions.[6] Paula D. Watson examined norms of productivity and publication activity, identifying the affiliation of authors as well as the most productive libraries and library schools.[7] Lois Buttlar also identified the most productive library schools, as well as the most popular subjects contained in sixteen library journals published from January 1987 through June 1989.[8] Christine A. Korytnyk compared publishing patterns by gender for those individuals holding doctoral degrees in librarianship, and Judith Serebnick maintained that "many, if not most, articles in scholarly journals are coauthored."[9,10]

Peer Review

Peer review has been the subject of extensive analysis within the scholarly literature. According to Mary Biggs, "striking signs that something is amiss with peer review are the low levels of agreement among referees and, after publication, between referees and readers."[11] Further, she notes that peer review may prolong the period for a journal to render an editorial decision.[12]

Based on such evidence, Biggs conjectured that "substantial numbers of peer reviews are compromised by prejudice, ignorance, carelessness, hurry, or uncertainty, or misapprehension about the journal's values."[13] She also suggested that "when consensus among reviewers, or even a majority 'vote,' is required for acceptance of a manuscript, the tendency toward safe, unexceptionable decisions and avoidance of intellectual risk-taking is likely to be especially marked."[14] Peer review, she asserted, "penalizes innovation and nonconformity."[15]

Rebecca M. Blank investigated *The American Economic Review* (*AER*) and found that:

> On average, it takes 22 weeks for a final publication decision to occur at the *AER*. This varies greatly between acceptances and rejections, however, with an average length of time to rejection of 18 weeks, and an average length of time to acceptance of 54 weeks. The median paper is sent to two referees. Only a few papers (5.7%) are rejected with no outside review, and only a small percentage of papers are sent to more than two referees.[16]

She also found that even though there was blind reviewing,

> a substantial fraction—almost half—of the blind papers . . . could be identified by the referee. This indicates the extent to which no reviewing system can ever be fully anonymous.[17]

Lowell L. Hargens investigated rejection rates for thirty scientific and social science journals. He found that rejection rates were "very stable over time and are largely unaffected by changes in submission."[18] He concluded that journal space shortages and the nature of scholarly communication within a discipline largely explain these rates.

Although there have been numerous studies and criticisms of the manuscript review process, few investigators have had access to manuscripts submitted for publication and reviewer assessments. It is more common to assess the characteristics of published authors or the quality of published research, or to report the opinions of editors.[19,20] Donald W. Fiske and Louis F. Fogg scrutinized the internal process of peer review, analyzed reviewer assessments and editors' decision letters for 153 papers submitted to American Psychological Association journals in late 1985 and 1986, and produced a classification of weaknesses noted by the reviewers.[21]

Other researchers have explored interrater agreement, or the agreement between reviewers over a manuscript's suitability for publication. They disagree concerning the most appropriate statistic or index of agreement.[22] Von Bakanic, Clark McPhail, and Rita J. Simon examined reviewer comments on manuscripts submitted to the *American Sociological Review* from 1977 to 1981. Using content analysis, "positive and negative comments were classified into twelve categories. . . . No manuscripts received unequivocally favorable reviews, but some reviews were less negative than others."[23] They discovered "that referee selection can increase the likelihood of rejection or publication" and that "the more days involved in reaching a decision, and the more referees, the less likely referees' recommendations were favorable."[24] They suspected that the editors, but not the referees, of journals subject to blind reviewing might be swayed by the name, academic rank, and affiliation of persons submitting manuscripts for possible publication. The editors, they inferred, might take such variables into account when assigning manuscripts to reviewers.[25]

As part of their study, Simon, Bakanic, and McPhail examined complaints of authors whose papers were rejected for publication, concluding that a complaint might result in the editors of the *American Sociological Review* reconsidering a paper for publication. In fact, 13% of the complainants "managed to have their rejection changed to an acceptance."[26] Clearly, this study offers "interesting insights into the decision process of a professional journal, the management of disputes, and the recourse of rejected authors."[27]

Erwin O. Smigel and H. Laurence Ross studied the editorial decisions and related correspondence for 193 manuscripts submitted to *Social Problems* between 1958 and 1961.[28] They measured quality, or the extent of consensus among reviewer recommendations. Charles Bonjean and Jan Hullum examined letters that the editors of the *Social Science Quarterly* wrote to rejected authors between 1973 and 1976.[29] They organized the reasons for rejection into the following categories: unimportant

TABLE 1
NUMBER OF ARTICLES PER VOLUME EXAMINED

	No. of Articles for Which There Is Correspondence	No. of Articles in the Volume
1980	3	30
1981	31	42
1982	22	41
1983	44	44
1984	46	47
1985	36	38
1986	52	52
1987	21	40
1988	44	44
1989	52	52
1990	34	37
1991*	24	40
Total	409†	507

* See note 32 and 33 under References and Notes section.

contributions, methodological shortcomings, theoretical problems, poor presentations, and editorial discretion. In their letters the editors made direct and indirect references to reviewer comments.

Finally, in a fascinating and controversial study, Douglas P. Peters and Stephen J. Ceci changed the titles and the authors' names of articles published in psychology journals, slightly altered the abstracts, retyped the articles, and submitted them to the journals that originally published them.[30] In general, journal editors did not recognize that the articles had been previously published, and they rejected the papers. Michael J. Mahoney, in another study, found low correlations between the ratings of reviewers on the same paper.[31]

PROCEDURES

The current editor of *C&RL* supplied the authors with ten boxes of internal records, including files on accepted and rejected manuscripts, and miscellaneous editorial board correspondence. Some of these records dated from the late 1960s.

A key element underlying data analysis and interpretation is the depth of the files that the authors examined. The authors divided the correspondence into two groups: those that were accepted/published and those that had been rejected. By comparing the first group (accepted/published) to the contents of each volume of *C&RL*, they discovered that they had correspondence for 80.7% of the articles published between 1980 and 1991.[32,33] (See table 1.)

While some journal editors have complained publicly about the extent to which prospective authors simultaneously submit the identical paper to different journals, *C&RL* apparently has not had the same experience to a significant degree.

Even with corroborative correspondence:

- In some instances the correspondence was incomplete
- It was not possible to determine the number of reviewers in every instance.
- It was not possible to establish the number of manuscripts submitted and rejected per year.
- Copies of manuscripts were not always kept for office files. Thus when reviewers wrote comments on the original manuscript, and the manuscript was not filed, those remarks were not available to the authors.
- Although some manuscripts and correspondence for the years under study were missing from the boxes of records, the authors had access to a considerable amount of correspondence over a prolonged period of time.

The Issue of Privacy

Unlike other research into peer reviewing, the names of the authors and the reviewers were retained in the available correspondence. Such information proved useful in the identification of authorship characteristics, but presented a potential ethical issue: authors of papers submitted to *C&RL* were unwitting participants in this study. Every effort was made to avoid referring to the names of authors and reviewers.[34] With the thought that there should be a time lag of a few years between data analysis and the reporting of findings, data collection and analysis terminated with 1990. Further, all editorial and reviewer correspondence was summarized anonymously onto a data collection sheet, one that did not include the names of reviewers. The names of authors were preserved in different database files, further separating them from manuscripts and acceptance/rejection decisions. Finally, once the authors of this article had verified the accuracy of data entry, they shipped the ten boxes to the American Library Association (ALA) archives as a further precaution against matching names with manuscripts.

Data Collection Form

The authors drafted a form based on the ones appearing in past studies, on published guidelines appearing in *C&RL*, on their experiences serving on editorial boards, and on having reviewed papers for publication in scholarly journals.[35,36] They arbitrarily selected one of the boxes and the first ten files at the front and back. Based on the correspondence, they reviewed and modified the form, examining the other files in that box and further refining the form.[37,38]

Quality Control, the Database, and Report Generation

The authors read each completed data collection form to verify that all items had been answered, and answered in a consistent manner. Next, they randomly selected one hundred files and double-checked the correspondence for accurate scoring and coding. No discrepancies resulted, and the data collection forms were entered into database files created with dBASE III+.[39]

To guard against data omissions, ambiguities, and inconsistencies, the authors compared each machine-readable record to the data collection form twice—on separate occasions. They also compared a systematic sample of the forms (every eleventh one, for a total of eighty-four) with the contents of computer printouts generated from the database. No discrepancies were found. Another author ran special programs against the data to reveal inconsistencies; none were found. At this point, the authors mailed the boxes of internal records to ALA Archives at the University of Illinois at Urbana.[40]

LIMITATIONS

Ten boxes of *C&RL* internal records provided the data for this study. The authors did not examine the manuscripts themselves, given that so few remained. To determine if a rejected paper had been published elsewhere, they checked the paper and CD-ROM version of *Library Literature* and *ERIC*. Conceivably, some papers might have changed titles or appeared in the literature of other disciplines/professions. Furthermore, some papers rejected in 1989 and 1990 may have been recently published or accepted but not published prior to the writing of this article.

Although it would have been a worthy aspect to examine, and although one study has already considered the subject for selected journals, the authors could not comment on the sources of grant support for manuscripts, given the minimal retention of manuscripts and the lack of information on grant support in most correspondence. The authors are therefore unable to duplicate that research.[41]

FINDINGS

This article does not identify individual authors, reviewers, and editors, or specific editorial decisions.

Submissions

For 662 (71.8%) of the 922 papers analyzed for this study, there was one author. Two people wrote 206 (22.3%) papers. Forty-nine (5.3%) papers had between three and six authors; for the remaining 5 (0.5%) papers, the authors had the titles of the manuscripts, but not the names of the authors.

The gender of the 1,242 individuals submitting papers for possible publica-

TABLE 2
LEADING ACADEMIC INSTITUTIONS—
THOSE WITH THE MOST AUTHOR SUBMISSIONS

Institution	No. Submissions	No. Accepted	No. Rejected
University of Illinois, Champaign/Urbana	50*	33	16
Ohio State University	24	16	8
Indiana University, Bloomington	23	12	11
SUNY–Buffalo	20	12	8
University of North Carolina, Chapel Hill	18	15	3
University of Arizona	17	8	9
Brigham Young University	16	10	6
Purdue University	16	7	9
University of Illinois, Chicago	15	11	4
University of Michigan	15	11	4
University of California, Berkeley	14	8	6
Virginia Polytechnic Institute	13	11	2
Syracuse University	12	7	5
University of Oklahoma	11	6	5
Kent State University	11	2	9
University of Minnesota	11	7	4
Washington State University	11	5	6
California State University, Long Beach	11	2	9
Georgia State University	11	2	9
Other	828	335	328
Total	1,147	520	627

* One author withdrew the paper before an editorial decision was reached.

tion was 630 (50.7%) female and 599 (48.2%) male. The gender for 13 (1.1%) of the submitters was undetermined.[42] Some 1,124 authors of the 922 papers under review worked in the United States at the time of submission.[43] Of these, 234 (20.8%) worked in the Northeast, 366 (32.6%) in the Midwest, 289 (25.7%) in the South, and 235 (20.9%) in the West.[44] The eight states with the largest number of submitters were:

- California (121)
- Illinois (115)
- New York (108)
- Ohio (69)
- Indiana (53)
- Pennsylvania (51)
- Texas (46)
- North Carolina (36)

Of the 103 submitters from outside the United States, the majority were from either Canada (40 submitters, or 38.8%) or Nigeria (26 submitters, or 25.2%). The remaining 35.9% were from Australia (7), Saudi Arabia (5), England (5), and other (20).

For authors working in the United States and elsewhere, the institutional affiliation was identified in 1,235 instances. Overwhelmingly (1,147 or 92.9%), they work in academe:

- 26 in community colleges
- 50 in baccalaureate institutions
- 217 in master's-granting institutions
- 854 in doctoral-granting institutions

Table 2 identifies the nineteen academic institutions whose administrators, faculty (library and nonlibrary), and student body account for the most submissions. The University of Illinois at Champaign/Urbana and Ohio State University rank first and second respectively. Viewed from a different perspective, the 1,242 authors submitting papers

TABLE 3
POSITION OF THE INDIVIDUALS SUBMITTING PAPERS

Position*	No.	%	Cumulative %
Acquisitions librarians	25	1.7	1.7
Administrators	415	28.3	30.0
Archivists	24	1.6	31.6
Bibliographers†	44	3.0	34.6
Bibliographic instruction librarians†	23	1.6	36.2
Branch/department librarians	33	2.2	38.4
Cataloging librarians	44	3.0	41.4
Circulation librarians	16	1.1	42.5
Collection development and management librarians	50	3.4	45.9
Government documents librarians	19	1.3	47.2
Reference librarians	232	15.8	63.0
Serials librarians	11	0.7	63.7
Systems analysts	15	1.0	64.7
Technical services librarians	22	1.5	66.2
Other librarians	133	9.1	75.5
Library school faculty	136	9.3	84.8
Master's and doctoral students in library school programs	30	2.1	86.9
University administrators	30	2.1	89.0
Students/faculty in subject departments	67	4.6	93.6
Nonuniversity individuals	61	4.2	97.8
Unknown	35	2.5	100.2‡
Total	1,465	100.0	

* A person might be included in more than one category.

† Quite possibly this category is underrepresented. It was impossible to tell from the correspondence how many reference librarians are indeed bibliographic instruction librarians or bibliographers.

‡ Subject to rounding

encompass 448 separate institutions and organizations.

Another way to view the data depicted in the table is to compare the number of submissions by institution to the number of submissions by state. In so doing, the two universities in Illinois account for 56.5% of that state's submissions. Ohio State University contributes 34.8% of that state's submissions, while SUNY-Buffalo and Syracuse University constitute 29.6% of New York submissions. For Indiana and North Carolina, the percentages are 43.4 for Indiana University at Bloomington, and 50 for the University of North Carolina at Chapel Hill.

Table 3, which depicts the position of the prospective authors, indicates that librarians accounted for 75.5% of the submitters. Among the librarians, those holding administrative positions accounted for the largest percentage—28.3. Almost half of the submitters (48.7%) were administrators and/or reference librarians, bibliographic instruction librarians, or bibliographers.

Some 136 individuals were affiliated with schools of library and information

TABLE 4
EDITORIAL DECISION

	No.	%
Acceptance*		
Without change	175	39.2
Revise prior to publication	208	46.5
Special (invited papers)†	64	14.3
Total	447	100.0
Rejection		
No encouragement	138	28.7
Helpful suggestions provided	105	21.8
Submission to *C&RL News* encouraged	42	8.7
Submission elsewhere encouraged (and titles of journals given)	196	40.8
Total	481‡	100.0

* A paper may appear in more than one category, e.g., a special paper may not have required change. Still, see note 33.

† This category refers to papers reprinted from other periodicals; a synopsis of a report or the report itself; reprinted conference papers; and papers invited for the 50th anniversary volume (1989).

‡ The editors rejected 33 papers without seeking reviewer assessments. These papers are included among the four reasons specified for rejection.

science. The overwhelming majority (116 or 85.3%) work at schools accredited in the United States and Canada. The remaining twenty faculty members reside with nonaccredited schools in the United States (5) as well as with schools in other countries (15). Some 60.3% (70 authors) of the faculty members from accredited schools were men; the remaining percentage consists of women faculty members (45) and one person whose gender could not be determined.

While some journal editors have complained publicly about the extent to which prospective authors simultaneously submit the identical paper to different journals, *C&RL* apparently has not had the same experience to a significant degree.[45] There were only four documented instances (0.4%), and on one occasion, another journal published an identical paper at the time when *C&RL*'s referees were making their assessment. In another case, *C&RL* apparently did not learn about the identical treatment until after it had published the paper.

The internal records examined for this study contained two reviewer assessments for 606 (65.7%) papers, one assessment for 109 (11.8%) papers, and between three and five assessments for 45 (4.9%); the correspondence for the remaining 162 (17.6%) papers did not contain any reviewer assessments. Members of the editorial board performed at least 92% of these 1,464 assessments; in 10 instances there was insufficient documentation to identify the reviewer.

For 638 of the 922 papers examined, the internal correspondence reflected the extent to which the reviewers concurred over acceptance and rejection. They concurred 403 times and disagreed 235 times. In 78 instances where there was disagreement (33.2%), the editor sided with the reviewer(s) favoring acceptance. Clearly, when a paper had a mixed response, the editor most likely refused to publish it.

For a related perspective on the outcome of the reviewing process, the authors coded the editors' letter of rejection to see if their comments differed from those of the referees. There were differences in only 11 instances (1.7% of the 638 papers). When the editors used reviewers they obviously value the judgment of the reviewers; however, without knowledge of how and why editors select particular reviewers, additional comment is not possible.

For 15 (1.6%) of the 922 papers, reviewers lamented that *C&RL*'s editorial staff had failed to remove the name of the author from the manuscript. One reviewer, however, did comment that "lately most of the manuscripts have not been blinded. I strongly prefer that they be!"

Table 4 summarizes the editorial decision rendered for the 922 submissions examined for this study. The various editors accepted 385 (or 41.8%) papers for publication, while rejecting 518 (56.2%) papers. For the remaining 19 papers, the authors withdrew them from consideration, or the editors asked the authors to revise their papers before rendering an editorial decision. There is no record that the papers were revised and resubmitted. With one of the rejected papers, where an editor provided helpful comments, the author extensively reworked the paper and ultimately *C&RL* published it.

Accepted Papers

More than one-third (35.1%) of the accepted papers had more than one author. The gender of the 562 individuals who had papers accepted for publication was 47% (264) female and 52% (292) male; the gender for six authors was undetermined. Of the faculty from accredited schools of library and information science, 65.1% were men.

Some 520 authors worked in the United States at the time of acceptance of their paper. Of these, 101 (19.4%) worked in the Northeast, 184 (35.4%) in the Midwest, 122 (23.5%) in the South, and 113 (21.7%) in the West. The states with the largest number of submitters were:

- California (58)
- Illinois (56)
- New York (49)
- Ohio (34)
- Texas (24)
- Pennsylvania (21)
- Indiana (21)

No significant differences appear in the frequencies of states for submitting and accepted authors, although Texas occurs more often on the list of accepted authors, and Minnesota and North Carolina occur 19 times.

Of the 31 authors residing outside the United States, the majority were from either Canada (16 or 51.6%) or Nigeria (4 or 12.9%). The remaining 11 (35.5%) were from seven countries.

Over three-fourths (404 or 77.7%) of the 520 authors affiliated with academic institutions work at doctoral-granting institutions. The next largest percentage (16.1 or 84 authors) is associated with master's-granting institutions. The remaining 6.2% encompasses baccalaureate programs (22 people) and community colleges (10).

Table 2 indicates the number of authors from the nineteen academic institutions who had papers accepted for publication in *C&RL*. Some 63 authors are affiliated with accredited graduate programs in library and information science. Viewed from a different perspective, 61 of the 110 papers (55.4%) submitted by faculty members at accredited library schools were accepted for publication. Forty-four of these papers were single-authored and 17 were coauthored.

The positions of authors who had papers accepted for publication parallel those of authors submitting papers for possible publication. In other words, 48.3% of the authors are administrators (e.g., library directors or departmental chairs) and/or bibliographers, bibliographic instruction librarians, or reference librarians.

For the 319 accepted papers for which correspondence indicates a date of receipt and of acceptance, the median number of days for the editors to render an editorial decision was 113; the mean was 134. The time frame does include any rewriting required of the author(s) prior to the editor's formal acceptance of the paper. In one case, it took approximately two years for the editor to render a decision; in this unusual case, one editor had misplaced the manuscript.

Reviewers recommended 1,054 changes to papers before acceptance. Some 470 (44.6%) of these recommendations related to editorial and writing problems, in particular the need to clarify a point, add definitions, or elaborate on a point (185 or 39.4% of the 470 recommendations). Another 166 (15.8%) of the recommendations related to an author's interpretation and conclusions. Most likely, the prospective author had failed to address key issues (60 recommendations or 36.1%) or the paper was too long or too short (57 recommendations or 34.3%). The next largest category (100 recommendations or 9.5% of the total) was the presentation of results. Most likely the reviewers called for the clarification or deletion of tables or figures (73 recommendations or 73%).

The three categories of recommendations (editorial and writing, interpretation and conclusions, and presentation of results) accounted for 69.9% of all the recommendations. The other categories (general, conceptualization, literature review, procedures, statistical analysis, and the planning and execution of results) generated between 10 and 60 recommendations. Clearly, these categories occurred less frequently for papers that reviewers recommended for publication.

In addition to offering negative comments, the reviewers expressed 138 positive comments on the papers that they recommended for publication after the authors addressed certain deficiencies. They most likely noted:

- The paper was well written (51)
- The topic selected was appropriate (29)
- The paper provided useful information (19)

These three reasons accounted for 71.7% of the positive comments.

Rejected Papers

As already mentioned, the editors rejected 518 papers for publication. They declined 33 papers as out of scope without seeking reviewer assessments. When rejecting papers, the editors' letters most often shared reviewer suggestions for improving the paper or offered advice on where to submit the paper.

The two primary reasons for rejection were that the paper offered little new material or insights (27.6%), and that the paper did not fall within the scope of the journal (14.1%).

Only 22.7% of the rejected papers were coauthored. Of the 663 authors, 358 (54%) were women and 298 (44.9%) were men; there was insufficient information to classify the remaining seven authors by gender.[46]

Some 591 authors resided in the United States at the time that the journal rejected their paper. Of these, 129 (21.8%) worked in the Northeast, 180 (30.5%) in the Midwest, 164 (27.7%) in the South, and 118 (20%) in the West. The states with the largest number of authors whose papers were rejected are identical to those given for the greatest number of submissions. Forty-six (63.9%) of the 72 authors submitting papers that were ultimately rejected live in either Canada (24) or Nigeria (22).

Some 71.8% (450) of the 627 individuals affiliated with academic institutions work in doctoral-granting institutions. The next largest percentage (21.2 or 133 people) is associated with master's-granting institutions. The remaining 7% includes baccalaureate programs (28 people) and community colleges (16).

Fifty-three authors who had papers rejected for publication were affiliated with accredited graduate schools of library and information science (29 male, 23 female, and 1 undetermined). In effect, 45.7% of those submitting papers from these schools had their paper rejected. Viewed from another perspective, 49 (44.6%) of the papers submitted by faculty of these schools were rejected; 34 of these papers were single-authored and 15 were coauthored with other members of their department, or librarians, or students. Rejection was based on the fact that the paper offered few new insights, reflected poor scholarship, was poorly written, or had problems in the methodology or in the presentation of findings. In two instances, however, editors deemed submissions to be outside *C&RL*'s scope. Of the 13 papers authored by deans and directors of accredited programs, 5 or 38.5% were rejected—for the same reasons noted above for faculty.

The percentage of administrators, reference and bibliographic instruction librarians, and bibliographers who had papers rejected for publication was 49.2. Most likely, the librarians who submitted papers and had them either accepted or rejected were affiliated with doctoral-granting institutions.

Content analysis of the titles of the 518 rejected papers indicates that the following ten topics were mentioned at least thirteen times:

- Cataloging/classification, including online public access catalogs (OPACs) and catalog use (42)
- Bibliographic instruction (41)

TABLE 5
REVIEWER REASONS FOR RECOMMENDING REJECTION OF PAPERS.
(RANKED IN ORDER OF PRIMARY REASONS

Reason	Primary No.	Primary %	Secondary No.	Secondary %
Offers little new material/insights	208	27.6	40	5.9
Out of *C&RL* scope; little relevance to *C&RL* readership	106	14.1	12	1.8
Poorly written	68	9.0	57	8.5
Narrow scope; lacks generalizability	60	8.0	26	3.9
Body of literature omitted	35	4.6	48	7.1
Paper merely descriptive/narrative	28	3.7	7	1.0
Sampling problem	27	3.6	24	3.6
Purpose/objective/questions/hypotheses unclear/needed	21	2.8	14	2.1
Poorly developed paper	21	2.8	4	.6
Lacks logical organization; needs reorganization	16	2.1	27	4.0
Interpretations/conclusions not warranted by data	12	1.6	30	4.5
Control problem (experiment)	11	1.5	12	1.8
Concepts poorly defined; terminology incorrectly used/confusing (Theoretical presentation incomplete, needs expansion): not well thought out	11	1.5	16	2.4
Key issues not addressed	—	—	52	7.7
Discuss/elaborate a point	—	—	41	6.1
Paper too long/short; delete/ add section	—	—	19	2.8
Tables /figures need clarification	12	1.6	12	1.8
Other	118	15.6	231	34.4
Total	754	100.1	672	100.0

Percentages subject to rounding

- Collection development (35)
- International librarianship (33)
- Management (30)
- Academic/faculty status (20)
- Staffing/personnel (19)
- Database searching (16)
- Reference services (16)
- Circulation (13)

Some 60 papers dealt with technology and seven addressed change. Clearly, the papers encompassed a wide range of topics.

Table 5 summarizes the most frequently mentioned reasons for which reviewers recommended rejection, while table 6 offers miscellaneous reviewer comments. In some cases, reviewers only indicated primary reasons, while in other instances they suggested secondary reasons. Often they provided more than one reason.

The two primary reasons for rejection were that the paper offered little new material or insights (27.6%), and that the paper did not fall within the scope of the journal (14.1%). Both reasons were mentioned in more than one-third of the instances. Turning to secondary reasons, reviewers most likely mentioned that the paper was poorly written (8.5%), omitted a body of literature (7.1%), and offered little new material or insights (5.9%). These three reasons accounted for 21.5% of the secondary reasons.

Twenty-seven reviewer assessments indicated that the paper had failed the "so what test" and that 35 papers merely reflected "how we do it good at our library."

Only 48 (9.3%) of the rejected papers elicited positive comments from the reviewers. Most likely, they noted that the

TABLE 6
MISCELLANEOUS REVIEWER COMMENTS ON REJECTED MANUSCRIPTS

1. The paper "reads like a book report," "reads like a term paper," or "reads like a dictionary."
2. The author "uses fancy words instead of clear thoughts."
3. "It is one of the few papers I've seen for which I can offer little constructive criticism; it is that bad."
4. This is "another ho hum, so what article."
5. "What is the real point of the paper?"
6. The "paper is superficial and dull."
7. The "author makes great leaps in his/her thinking."
8. "Every time I read an article like this, I wonder why any sane person would take the time to expend so much effort to produce answers that any practical librarian with an ounce of common sense could easily answer."
9. "In the two years of reviewing papers, this one has the most typos and grammatical errors. I counted 56 in the 45 pages of text and I may not have caught them all."
10. "This has to be an after-dinner speech of the type frequently heard at the Polly Perfect Club circa 1932."

paper was well-written (30 or 62.5%), addressed an important topic (8 or 16.7%), noted a valuable literature (3 or 6.3%), or was well reasoned (3 or 6.3%).

Some 216 rejected papers were published elsewhere. *C&RL* rejected one paper as an article but published it as a letter to the editor. Table 7 depicts where the remaining 215 papers were placed; since this study did not monitor publishing practices of other sources, it cannot be assumed that these sources accepted the papers unchanged. As might be expected, *College & Research Libraries News*, *ERIC* documents, and conference proceedings accounted for a sizable percentage—23.2. Another 31.2% of the papers appeared in *The Journal of Academic Librarianship, Collection Management, RQ, Library Administration & Management*, and *Research Strategies*. In effect, over half of the papers published elsewhere appeared in the above-mentioned eight sources.[47]

Viewed from another perspective, state library periodicals published 5 rejected papers (2.3%) and periodicals published outside the United States issued 19 rejected papers (8.8%). The papers rejected for publication appeared in 52 different periodicals, as well as in the *ERIC* clearinghouse and in conference proceedings; expressed another way, more than 40% of the rejections were ultimately published. It should not be assumed that rejected equates with lesser quality or that the journals depicted in table 7 are inferior to *C&RL*. One reviewer from the editorial board commented as follows: "Because *C&RL* has a wide readership, I find that I often have to reject perfectly good articles simply on the grounds of a lack of general interest or applicability."

For the 433 rejected papers for which correspondence provided a date of receipt and of acceptance, the median number of days for the editors to render an editorial decision was 83; the mean was 91.

In only eight instances was there documentation to indicate that the authors of rejected papers complained about the outcome of the editorial decision. They disagreed with the assessment of referees and the outcome itself. In one instance, an editor sought additional assessments of the paper; ultimately, the editorial decision remained unchanged. The problem specified in note 26 did not materialize for *C&RL*: there were no reversals of a decision.

Research Notes

The July 1981 issue of *C&RL* marked the appearance of *Research Notes*, an occasional section whose "purpose is to

TABLE 7
PLACEMENT OF REJECTED PAPERS IN OTHER SOURCES

Source	No.	%
Journal of Academic Librarianship	21	9.8
C&RL News	20	9.3
ERIC	17	7.9
Collection Management	15	7.0
Various conference proceedings	13	6.0
RQ	12	5.6
Library Administration & Management	11	5.1
Research Strategies	8	3.7
Collection Building	7	3.3
Libri	7	3.3
Information Technology and Libraries	6	2.8
Library & Information Science Research	6	2.8
The Southeastern Librarian	5	2.3
Other*	67	31.2
Total	215	100.1

Percentages subject to rounding

* No journal in this category was mentioned more than twice

report the results of selected current research on specific topics. Items included in this section have been reviewed by members of the editorial board."[48] From that issue through 1990, *C&RL* published 67 papers as *Research Notes*. There was documentation for 48 (71.6%) of these papers as well as for 25 papers rejected for possible inclusion in this section. In the case of the rejected papers, the editors offered no encouragement (11) or helpful suggestions (7), or they suggested submission to *C&RL News* (4) or elsewhere (3).

COMPARISON OF FINDINGS TO PREVIOUS RESEARCH

Budd and Seavey, who examined authorship in 36 library and information science journals, identified the most productive institutions or those with the greatest number of authors.[49] A comparison of their table 4 to our table 2 indicates that the low-level correlation is not statistically significant (Spearman's rho = .37, t = 1.67, p > .05).[50] Watson also constructed a table (number 3) of most productive libraries.[51] A comparison of that table to table 2 also produces a low-level correlation that is not statistically significant (rho = .15, t = .64, p > .05). Regardless, the University of Illinois at Champaign/Urbana ranks first on all three lists. Furthermore, half of the institutions on either the Watson and Budd and Seavey lists do not appear in table 2. Of course, it bears reiterating that neither of these other studies focused exclusively on one journal and previewed submissions.

Watson discovered that library "administrators, branch and department heads, and subject and technical specialists produce the majority of the contributions and publish disproportionately in relation to their numbers."[52] By rearranging the data depicted in table 3 so that authors were listed under a single category, the groups specified by Watson constitute 45.5% of the submissions. Clearly, her groups produce a sizable percentage of the submissions. With the inclusion of nonlibrary administrators, the percentage becomes 51.2. By adding reference and bibliographic instruction librarians—two groups not represented in Watson's study—the percentage increases to 64.

Paul Metz presented a statistical profile of *College & Research Libraries*; his profile updated Gloria S. Cline's article that covered the years 1980–1988.[53] According to him, "a dramatic increase in the representation of women among *C&RL*'s authors has been perhaps the most notable change in the journal's recent history."[54] He reported the gender for only the senior author and displayed the findings in two blocks: 1980–1984 and 1985–1988. In contrast, this study covered all authors, examined submissions and rejections as well as acceptance or publication, and did not divide the findings into blocks corresponding to different editorships. The percentage of women submitting papers exceeds that for men. It can be presumed that since *C&RL* practices a blind reviewing process and that reviewers did not comment on gender in their written assessments, gender probably does not play a role in rendering an editorial decision. Nonetheless, the percentage of women authors falls below the percentage of women submitters and women do account for a slightly higher, but perhaps insignificant, percentage of rejected papers.[55]

Given the leadership role that schools of library and information science should play in research and publishing, it is important to know more about the breadth, depth, and quality of the research emanating from them and whether other journals experience similar rates of rejection for these faculty members.

Metz examined senior authors on the basis of the type of library in which they worked. This study does not present a similar analysis. However, academic librarians do comprise the largest percentage of submitters and authors.

Metz notes a "trend toward multiple authorship." Furthermore, "even among articles having multiple authors, there is a pronounced trend toward the sharing of authorship among three or more individuals."[56] An examination of submissions would not support this trend; single authorship predominates (72.2%). However, ignoring other variables, multiple-authored works stand a better chance of acceptance and publication; 35.1% of the accepted papers had collaborative authorship while 22.7% of the rejected papers did.

FURTHER RESEARCH

Assuming that other journal editors would cooperate, this study might be replicated and the findings compared. As well, researchers might use focus group and other interviewing techniques to gauge the reaction of editors, editorial board members, prospective authors, and authors who have dealt with particular journals.

In relation to table 2, researchers might examine whether librarians at those institutions have faculty or academic status. They might also consider two questions that Budd and Seavey raised:

> If there is a form of faculty or academic status, is publication of articles in journals of library and information science required for purposes of tenure or continuing status and if there is a form of faculty or academic status, is publication required for promotion?[57]

The examination of these questions might involve the use of case studies, focus group and in-person interviewing, as well as (or in place of) a mailed questionnaire. The research might also look at gender and place it within the context of other variables, e.g., the position and expectation of the institution that libraries will publish.

A factor influencing an editor's decision to publish a paper might be the extent to which the paper would spark debate and controversy. The purpose might be to generate national discussion and stimulate the submission of letters to the editor. Such purposes merit investigation perhaps through the use of social judgment analysis and focus group interviewing.[58]

Given the leadership role that schools of library and information science should play in research and publishing, it is important to know more about the breadth, depth, and quality of the research emanating from them and whether other journals experience similar rates of rejection for these faculty members.

CONCLUSION

Premier journals in the sciences choose from a wide variety of manuscripts and what they decline to publish often appears elsewhere.[59] Since 41.7% of the papers that *C&RL* rejected for publication subsequently appeared in other periodicals, in conference proceedings, and as *ERIC* publications, the literature of library and information science apparently conforms to the same pattern as the sciences.

A factor influencing an editor's decision to publish a paper might be the extent to which the paper would spark debate and controversy.

The present editor of *C&RL* lists the most common reasons for the rejection of papers as:

- Not generalizable
- Failure to answer the "so what" question
- Poor writing
- Inadequate scholarship
- Weak statistical methods
- Wrong choice of journal
- Bad luck (See Editorial, *C&RL* 54 [May 1993]: 195–97).

The last category recognizes, for instance, that *C&RL* might have received multiple papers on the same topic.[60] It would seem that the present editor's observations on rejections are supported by the previous decade of submissions and the experiences of past editors. Individuals considering submission to *C&RL* should ensure that their papers can withstand criticism, based on these seven points and one more: "offers little new material/insights."[61]

These eight points serve as a reminder that papers evaluated for publication in *C&RL* are as strong as their weakest aspect. A missing or weak element might make the difference between the opportunity to revise the paper and rejection. Authors must select appropriate topics or problems, justify the importance of those topics or problems (address the study's generalizability and the so-what question), and demonstrate good scholarship or research. As well, they must produce well-written papers, portray the literature accurately, and acknowledge intellectual debts.[62]

In a number of instances, both editors and reviewers have advised authors, when the defects of their studies are not fatal, about how to revise their papers and where to submit them. At the same time, the guidance offered might assist potential authors as they prepare future papers.

It was surprising to find the high level of work performed by the editors and reviewers over the decade: their responsible approach to their work, their unending patience with authors, and their careful study of the manuscripts. This was not expected, especially given the critical and often negative comments on the reviewing process found in the scientific and social science literature.[63] The authors found careful review, reasonable turnaround, helpful suggestions to those submitting manuscripts, and tactful rejections. All the business was conducted without rancor, major disagreements, egotistical rantings, or self-promotion. Refereeing for C&RL filtered manuscripts and served the readership of the journal.

ACKNOWLEDGMENT

We wish to thank Gloriana St. Clair for providing the internal records and for generous support throughout completion of the study, and Linda Watkins, GSLIS librarian at Simmons College, for her suggestions and her unstinting efforts on our behalf. We also appreciate the support of the Emily Hollowell Research Fund, Simmons College, for assisting in data collection.

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38. A copy of the seven-page data collection instrument is available upon request.
39. Using dBASE III+ the authors wrote 2 sets of programs, 1 for data entry, based on menu-driven screens, and the other for data analysis, utilizing 36 relational database files, 17 indexes, 45 report forms, and 46 program files. Checks on the accuracy of data entry were built into the data analysis programs. Data were analyzed from time to time during data entry to ensure the integrity of the data analysis programs. Final data analysis took nearly nine continuous computer hours to generate ASCII report files for subsequent printing.
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IN FORTHCOMING ISSUES OF
COLLEGE & RESEARCH LIBRARIES

Scholars, Librarians, and the Future of Primary Records: A Talk Presented at the American Library Association, 1992
Phyllis Franklin

Exploring the Intellectual Organization of an Interdisciplinary Research Institute
Bryce L. Allen and Brett Sutton

Time Patterns in Remote OPAC Use
Thomas A. Lucas

Book Availability: Academic Library Assessment
Eugene S. Mitchell, Judith L. Hegg, and Marie L. Radford

International Students in Academic Libraries: A User Survey

Mary Beth Allen

A study was undertaken to identify characteristics of the international student population and determine these students' patterns of library use. Analyses were carried out to measure a number of relationships concerning the students' prior use of microcomputers, both in libraries and otherwise, and their current perceived difficulties using libraries. Findings suggest that not all international students arrive in the United States with appropriate information retrieval skills to take advantage of automated bibliographic access systems. Libraries may need to make special efforts to extend instructional services to these students.

Cultural diversity on college campuses has increased in recent years. One segment of the multicultural environment of universities is international students. In academic year 1989/1990, there were more than 386,000 international students enrolled in colleges and universities in the United States, up 5.6% from the previous year. This was the largest increase in seven years.[1] Those who work in higher education share an agreement to embrace both cultural diversity and unity, and to actively remove barriers to communication and learning.

To ease the transition of international students from their indigenous culture to American culture, most universities operate an office of international student affairs which performs the basic welcoming and orientation function for students newly arrived from other countries. Many academic departments also do their share to make new students feel comfortable and, whether intentionally or not, may serve as a smaller community through which new persons can learn about academic life in the United States and gain a sense of what is expected of them as they make progress toward completing a degree. As a crucial component of serious scholarship at any level, the library is also responsible, not only for making its collections and services available to the scholarly community and the public but also for teaching newcomers the strategies and processes by which they can independently maneuver through the increasingly complex variety of bibliographic access systems.

BACKGROUND AND LITERATURE REVIEW

Currently, there is a strong interest in higher education (and among public service librarians) in investigating the need for programs and services targeted at special populations, such as international

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students. The literature of librarianship contains important contributions that aid our understanding of the difficulties international students face as they begin to use academic libraries in the United States. Excellent overviews of the major writings on the role of bibliographic instruction and other library services for international students have been reported in Ormondroyd and Jacobson.[2,3] In addition, an examination of the library's role in the pluralistic campus, including appropriate administrative initiatives, can be found in Trujillo and Weber as well as in Welch and Lam.[4,5]

The literature of librarianship contains important contributions that aid our understanding of the difficulties that international students face as they begin to use academic libraries in the United States.

However, thorough data analysis or "experimental and case studies of the students' problems are almost nonexistent."[6] Recent research projects conducted by Dania Bilal, Kwasi Sarkodie-Mensah, Ting Ming Lai, and others are examples of thorough data analysis that have reversed this trend and made a significant contribution to the body of literature on international students' use of United States academic libraries.[7] Still, most of these studies were completed before the use of microcomputers (such as for OPACs) became such an integral part of the basic library research process. To new international students on our campuses, the presence of microcomputers in the library and the necessity of their use to access vast stores of information might constitute one of the major differences between libraries in their home countries and those in the United States.

In research involving international students who were in the United States seeking a degree in library and information science, Silas Marques de Oliveira compared the strengths of program areas in American library and information science departments with program areas that students entering United States educational institutions considered important or desirable. One of Oliveira's findings was that the library and information science program areas that students considered to be most needed in their home countries were all technological in nature (automation, information services, information transfer, and networking).[8] The obvious implication is that these international students perceived the technological advances of American libraries to be of interest, and further that such technology was perhaps unavailable to them at home. Oliveira concludes that "the technological areas . . . are not only the areas in which most of the [United States] schools consider themselves as having very strong programs, but are also the areas most mentioned as being greatly needed in most of the [foreign] countries represented in this study."[9] A further implication is that use of computers in libraries is not prevalent outside the United States.

PROBLEM STATEMENT

The present study responds to the need for research aimed at determining what place the library holds in the education process of the diverse population of students on our campuses, which includes international students. It responds to the growing need among academic institutions to assess what perceptions international students have of research libraries, how they use libraries during their academic tenure, and what difficulties they encounter in their efforts to utilize the libraries' services and collections. More specifically, the study examines international students' use of microcomputers for bibliographic access in libraries, and their use of computers for other purposes (word processing, database management, spreadsheets, etc.) outside libraries. The method chosen for the study, which will be described in more detail in a subsequent section, will consist of a survey of the user population and their use of the library. The information obtained will be useful in planning and implementing library services for international students, and perhaps for the larger user community.

METHODOLOGY

The present study was carried out in response to the doctoral research of Kwasi Sarkodie-Mensah. The questionnaire used in the current project closely resembles that of Sarkodie-Mensah, which was completed at two New Orleans, Louisiana, academic libraries; however, neither of those two libraries employed an online catalog at the time, so there is significant interest in complementing the previous work with data gathered at a library like that of the University of Illinois, where utilizing the library's collections (and resources within the state) is synonymous with independently utilizing a variety of computerized information sources. Workstations throughout the main library and in a variety of departmental library locations across campus provide access to an online catalog with library holdings and circulation information not only for the Urbana campus but also for over forty other cooperating university, college, public, and other libraries within the state of Illinois. In addition, many of the workstations provide access to local reference files and locally mounted databases. Other workstations only provide access to databases on CD-ROM. The purpose of conducting this user survey was to test statistically the relationship between the difficulty that international students might experience using the University of Illinois library and the degree of their familiarity with computers. The study examines two areas: (1) online catalogs used in libraries, and (2) other uses of microcomputers outside libraries. The international students were asked:

- if the online catalog was new to them
- if online catalog workshops were new
- whether they found the online catalog difficult to use
- if they had used computers in a library before coming to the University of Illinois
- whether they had previously used computers for other purposes, such as word processing, programming, etc.

A questionnaire was developed to assess not only computer use but also other primary library use patterns and utilization of collections, services, and facilities by international students. Basic demographic data were also collected. The questionnaire was based in content on the survey instrument used in Sarkodie-Mensah's research, although many questions were modified and additional questions, for example, those related to computer use, were included.[10] The survey instrument contained thirty-three questions, many of which required or allowed for multiple responses.[11] The six-page questionnaire was initially intended to be as comprehensive as possible concerning the students' library-use patterns. Therefore, the resulting data set is quite large and covers a wide range of crucial library use issues. For practical purposes, the present report will focus specifically on questions aimed at international students' use of computers.

RESEARCH DESIGN

The university's Office of Administrative Information Systems and Services and Office of International Student Affairs assisted in drawing the random sample population by providing access to university directory information for the 3,401 international students who were on the mailing list of the Office of International Student Affairs. During the fall semester of 1988, the survey was mailed to a random sample of 750 international students on the Urbana campus. A total of 395 (52.7%) surveys were returned. A double-coding procedure was undertaken, with the first coding done by the Library Research Center staff, and the second one done by the author for the purpose of gaining familiarity with the data. Survey data were tabulated and analyzed using SPSS/PC+.

The Office of Admissions and Records reports that international students account for only 1% of the 26,000 undergraduate students on the Urbana campus, but they constitute 25% of the 9,000 graduate students, so the expectation was that the survey population would be primarily graduate students. In response to the question "What degree are you working on?" some 59.0% of the population reported that they were working toward Ph.D.'s and 29.5 indicated that they were pursuing master's degrees, while only 8.4% were undergraduates. Thus the data gathered in this survey most closely represent patterns of graduate students' library use rather than those of the total international student population.

FINDINGS

Table 1 shows the frequency distribution of users by field of study or major. On the questionnaire, the students were asked their major or area of concentration. Since the variety of responses was so great, the data were collapsed into eight broad categories representing the gamut of majors. The largest number of students, 25.3%, indicated Engineering was their major. Next highest were Agriculture and Biological Science, with 18.3% of the population. A close third was Commerce and Business Administration, with 16.4%. Social Sciences represented 13.6% of the population, while Physical Sciences, Education, and Arts and Humanities each represented 10.4% or less of the group.

Country of origin is reported in table 2. Again, the data were collapsed because of the wide variety of responses. Seven broad geographic regions represent the collapsed responses. Asia was by far the region with the largest number of respondents, with 54.6% of the distribution. Europe and Oceania each represented 10.7% of the population, while South America represented 8.2%, the Middle East 6.8%, North America 5.2%, and Africa 3.8%.

Concerning the gender question, 31.8% of the students responding were female, while 68.2% were male. Another demographic factor examined was the total number of years the international students had already spent in the United States. Some 48.0% of the students who responded to the survey reported one to three years (table 3); 24.7% reported less than one year, while 21.9% said four to six years. Only 5.4% of the respondents had been in the U.S. six years or longer. Later, this variable will be examined further to determine if students who have been in the United States for several years experience less difficulty using the online catalog than those who have recently arrived.

TABLE 1
FIELD OF STUDY OF RESPONDENTS

Field of Study	Frequency	Valid %
Commerce and Business	63	16.4
Engineering	97	25.3
Agriculture and Biology	70	18.3
Social Sciences	52	13.6
Education	35	9.1
Physical Sciences	41	10.7
Arts and Humanities	24	6.3
Non-degree	1	.3

TABLE 2
GEOGRAPHIC DISTRIBUTION

Geographic Area	Frequency	Valid %
Asia	200	54.6
Africa	14	3.8
Europe	39	10.7
Middle East	25	6.8
North America	19	5.2
South America	30	8.2
Oceania	39	10.7

One of the first questions the students were asked in the survey was "How often do you use the library?" In response to this question, 57.4% of the students said they used the library less than once a day, but at least once a week. Some 24.3% responded that they used the library at least once a day; 15% reported their use at less than once a month but at least once a semester, and 3.4% reported less than once a semester. The data indicate that the majority of international students surveyed con-

TABLE 3
NUMBER OF YEARS SPENT IN U. S.

No. of Years	Frequency	Valid %
Less than 1 year	97	24.7
1–3 years	188	48.0
4–6 years	86	21.9
6 years or more	21	5.4

sider that the library occupies an important part of the educational environment. To gain an understanding of the students' general comfort level with libraries upon arrival in the United States, they were surveyed to see how prepared they were to use American college and university libraries. In response to the question, "How prepared were you to use American college and university libraries?" 49.9% of the international students said they were somewhat prepared, 28.0% felt very prepared, and 22.1% said they were not at all prepared. The data indicate that over two-thirds of those surveyed might benefit from at least some instruction or orientation to prepare them for using the library.

The data gathered in this survey most closely represent patterns of graduate students' library use rather than those of the total international student population.

One of the major purposes of the survey was to identify what aspects of library use were new to international students, or what features were different from libraries in their home countries. Table 4 shows the frequency distribution for a number of typical library services or characteristics. For this question on the survey, students could choose as many responses as applied, so that the percentages in table 4 represent the percentage of the total sample that responded to each part of the question. Computer database literature searching was chosen most frequently, with 61.2% of the students reporting that this aspect of library use was new to them. Some 59.6% said interlibrary loan ("requesting materials not in the library here from another library") was a new service, and 50.5% said the online catalog was new to them. These three most frequently chosen services all involve use of computers. Online catalog workshops and term paper research counseling also were considered to be relatively new, with 40.1% of the population responding to each service. The open-stacks characteristic of American libraries has often been reported in the literature as a new concept for foreign students; however, the data here indicate that only 12.0% of the students surveyed were unfamiliar with finding materials themselves in the open stacks. Thirty-one percent reported that large library collections were new to them, while 28.9% said microfiche and microfilm were new. Classroom instruction in the library was new to 28.1%, and self-service copy machines were new to 21.6%. Later in the analysis, the newness of the online catalog, unfamiliar to approximately half of the international students surveyed, will be compared with other variables.

To identify library orientation and instruction services the students might

TABLE 4
ASPECTS OF LIBRARIES WHICH WERE NEW TO STUDENTS

New Aspect	Frequency	Valid %
Interlibrary loan	229	59.6
Self-service copy machines	83	21.6
Microfiche, microfilm	111	28.9
Online catalog	194	50.5
Online catalog workshops	154	40.1
Computer database lit. search	235	61.2
Open stacks	46	12.0
Large library collections	119	31.0
Classroom instruction in the library	108	28.1
Term paper research counseling	154	40.1

TABLE 5
SERVICES STUDENTS HAD TAKEN ADVANTAGE OF

Orientation/ Instruction Service	Frequency	Valid %
Audiocassette self-guided tour	13	3.4
Tour guided by library personnel	150	38.7
Presentation by library personnel	76	19.6
Research skills instruction in library	34	8.8
Research methods course	50	12.9
Term paper research counseling	35	9.0
None of the above	173	44.6
Other	14	3.6

have used, they were given a list of services and asked, "Which of the following have you had since you came to this university?" Their responses are summarized in table 5. As in the previous case, the students could choose as many as applied, so the percentages represent the total percentage who responded affirmatively. The category receiving the highest frequency was "none of the above," perhaps an indication that the students were not aware of the services, especially those which are part of the course-integrated instruction program targeted primarily at undergraduates. Some 38.7% of those surveyed had taken advantage of a tour of the library guided by library personnel; this service is typically offered at the beginning of the fall semester, before the first day of classes. It is an hour-long tour of the physical facilities and provides more information than instruction. Nineteen point six percent responded that they had attended a presentation on the library conducted by library personnel, and 12.9% had taken a course in research methods that included instruction in using library resources (but not necessarily conducted by library personnel). Fewer than 10% of the survey population had taken advantage of services such as term paper research counseling/consultation, research skills instruction sessions in the library, and an audiocassette self-guided tour of the library. These findings indicate that a large proportion of the international student population does not participate in instructional activities commonly offered in academic libraries, yet a sizable number does attend orientation activities offered at the beginning of the term.

One of the major purposes of the survey was to identify what aspects of library use were new to international students, or what features were different from libraries in their home countries.

To focus on the students' perception of the online catalog, they were asked, "Is the online catalog difficult for you to use?" To summarize the frequency distribution of their responses, 12.9% said "yes," 54.4% said "no," 28.8% said "sometimes," and 4.0% answered by writing their own response. The data indicate that most of the sample population say they did not have difficulty using the online catalog.

Additional frequency counts indicate that a large majority of the respondents had used computers before, but not for bibliographic access in libraries. Table 6 shows that when asked if they had used computers in a library before coming to the University of Illinois, 69.6% had not and 30.4% had. When asked if they had used computers for other purposes, such

TABLE 6
PREVIOUS USE OF COMPUTERS

Purpose	Frequency	Valid %
In a library		
Yes	119	30.4
No	273	69.6
For other purposes		
Yes	333	84.9
No	59	15.1

TABLE 7
PREVIOUS USE OF LIBRARY COMPUTERS, BY DIFFICULTY USING ONLINE CATALOG

	Difficulty Using Online Catalog					
	Yes		No		Sometimes	
Previous Use of Library Computers	No.	%	No.	%	No.	%
Yes	20	17.7	51	45.1	42	37.2
No	29	11.6	154	61.6	67	26.8

Chi – square = 8.6; $df = 2$; $p < .05$; Cramer's $V = .154$.

TABLE 8
PREVIOUS USE OF OTHER COMPUTERS, BY DIFFICULTY USING ONLINE CATALOG

	Difficulty Using Online Catalog					
	Yes		No		Sometimes	
Previous Use of Other Computers	No.	%	No.	%	No.	%
Yes	34	11.0	183	59.4	91	29.5
No	15	27.3	22	40.0	18	32.7

Chi – square = 12.4; $df = 2$; $p < .01$; Cramer's $V = .184$.

as word processing, database management, programming, etc., 84.9% had done so and only 15.1% had not.

The hypothesis of interest is that international students with prior experience using computers in libraries might not have experienced difficulty using the online catalog at the University of Illinois. The null hypothesis being tested is that prior experience using computers makes little difference with regard to difficulty the students experience using the online catalog. For the procedure of hypothesis testing, the null hypothesis can be rejected if the observed significance level (probability) is less than 0.05. A cross-tabulation was performed to determine the relationship between the respondents' difficulty using the online catalog and their prior use of computers in libraries. Based on the frequency distributions, it was expected that students who had prior experience using any kind of computers in libraries would find the online catalog less difficult to use, perhaps because of familiarity with the concept of bibliographic access or with typical searching patterns. Table 7 shows that this was primarily the case. Of those students who had previously used computers in libraries, only 17.7% said the online catalog was difficult, while 45.1% said it was not difficult to use. Some 37.2% reported that it was sometimes difficult to use. Because the probability is small (0.013), the null hypothesis can be rejected; the low probability indicates that it is quite unlikely that the two variables are independent in the population. To test the strength of the association, a Cramer's V was conducted; in this statistical test, a value of zero corresponds to no association and a value of one to perfect association. For table 7, the value of Cramer's V is 0.154, indicating a fairly low measure of association. In the analysis represented by table 7, and in all further tables that represent cross-tabulations of the "difficulty using the online catalog" variable, the "other" response was recorded as missing because it was chosen by less than 5% of the respondents (fewer than 19 people). Next, a cross-tabulation was performed to determine the relationship between the respondents' difficulty using the online catalog and their prior use of computers for other purposes. Table 8 summarizes this relationship. Of the students who had previously used computers for purposes other than library information retrieval, only 11.0% said the online catalog was difficult, while 59.4% said it was not difficult to use. Conversely, of

TABLE 9
PRIOR USE OF LIBRARY COMPUTERS,
BY PREPAREDNESS TO USE UNITED STATES LIBRARIES

	Preparedness to Use United States Libraries					
	Very Prepared		Somewhat		Not at All	
Prior Use of Library Computers	No.	%	No.	%	No.	%
Yes	46	41.8	49	25.3	22	25.6
No	64	58.2	145	74.7	64	74.4

Chi – square = 10.2; $df = 2$; $p < .01$; Cramer's $V = .161$.

TABLE 10
PRIOR USE OF OTHER COMPUTERS,
BY PREPAREDNESS TO USE UNITED STATES LIBRARIES

	Preparedness to Use United States Libraries					
	Very Prepared		Somewhat		Not at All	
Prior Use of Other Computers	No.	%	No.	%	No.	%
Yes	103	93.6	158	81.4	70	81.4
No	7	6.4	36	18.6	16	18.6

Chi – square = 9.16; $df = 2$; $p = .01$; Cramer's $V = .153$.

those students who did not have previous experience with computers for other purposes, a larger percentage (27.3%) had difficulty with the online catalog, but a smaller percentage (40.0%) did not have difficulty. Based on a chi-square analysis, a statistically significant relationship (p = 0.002) between reported difficulty using the online catalog and previous experience with computers for other purposes exists, but the value of Cramer's V is 0.185, indicating that the strength of association is fairly low.

An analysis of the relationship between prior use of computers in libraries and the degree to which students are prepared to use American libraries is reported in table 9. Of students who felt very prepared to use American college and university libraries, 41.8% had used computers in libraries previously but 58.2% had not. Of students who felt somewhat prepared, only 25.3% had used computers in libraries, while 74.7% of this group had not used computers in the library setting. And of those not at all prepared, again, 25.6% had used computers in libraries previously, while 74.4% had not. The chi-square computation for this relationship is statistically significant, with $p = 0.006$, so it can be said that having used computers in libraries before and feeling prepared to use American libraries are not independent. However, the Cramer's V value is 0.162, indicating that the strength of association is low. Table 10 summarizes the similar, yet much more pronounced, relationship between prior use of computers for other purposes and students preparation to use American libraries. Of those students who were very prepared, 93.6% had used computers before for other purposes. Of those who were somewhat prepared, 81.4% had used computers for other purposes, but of those not at all prepared, 81.4% had also used computers before for other purposes. There does appear to be a statistically significant (with $p = 0.010$) association between international students' prior use of computers for other purposes and their feeling prepared to use American libraries. However, the strength of association is low, at 0.153, and because 85.9% of those surveyed had used computers for other purposes, the results may be misleading.

TABLE 11
NEWNESS OF ONLINE CATALOG,
BY PREPAREDNESS TO USE UNITED STATES LIBRARIES

	Preparedness to Use United States Libraries					
	Very Prepared		Somewhat		Not at all	
Newness of Online Catalog	No.	%	No.	%	No.	%
Yes	66	34.6	81	42.4	44	23.0
No	42	21.6	111	57.2	41	21.1

Chi – square = 10.1; *df* = 2; *p* < .01; Cramer's *V* = .162

TABLE 12
NEWNESS OF ONLINE CATALOG, BY DIFFICULTY USING ONLINE CATALOG

	Difficulty Using Online Catalog					
	Yes		No		Sometimes	
Newness of Online Catalog	No.	%	No.	%	No.	%
Yes	23	12.7	96	53.0	62	34.3
No	26	14.2	110	60.1	47	25.7

Chi – square = 3.18; *df* = 2; *p* > .05; Cramer's *V* = .093

In analyzing the relationship between the newness of the online catalog to users and their preparation for American libraries, table 11 shows that of those who reported that the online catalog was new to them, 57.2% felt only somewhat prepared to use American libraries, while 21.6% felt very prepared and 21.1% felt not at all prepared. The chi-square test revealed this association to be statistically significant, with a probability of 0.006. Using the Cramer's *V* test, the strength of association is low at 0.162. Table 12 summarizes the cross-tabulation of responses to the questions dealing with newness of the online catalog to users and their difficulty with it. As stated earlier, because of small cell size, it was necessary to record the "other" response to the "difficulty" variable as missing for this analysis. Based on a chi-square analysis, the relationship represented in table 12 is not statistically significant since the probability is 0.203 (testing at 0.05). The strength of association is very low, with the Cramer's *V* test yielding a value of 0.093. The results indicate that of persons who said the online catalog was not new to them, only 12.7% had difficulty using it, 34.3% sometimes had difficulty, and 53.0% did not have difficulty. Likewise, for those who said the online catalog was new, the percentages for difficulty of use were similar; the figures show that nearly the same number of persons reported yes as reported no to the newness question.

Table 13 summarizes the relationship between international students' preparation for American libraries and their difficulty using the online catalog. Based on chi-square analysis, the observed significance level of 0.007 indicates that there is a statistically significant association between the students' preparation for American college and university libraries and the difficulty they experience using the online catalog. The Cramer's *V* test yielded a value of 0.139, which represents a low strength of association. Of those who said they did have difficulty using the catalog, only 18.4% felt very prepared to use United States academic libraries, while 51.0% were only somewhat prepared and 30.6% were not at all prepared. Of those who said they did not have difficulty with the online catalog, 34.8%felt very prepared, 49.5% felt somewhat prepared, but only 15.7%were not at all prepared. The rela-

TABLE 13
PREPAREDNESS TO USE UNITED STATES LIBRARIES,
BY DIFFICULTY USING ONLINE CATALOG

Preparedness to Use Online Catalog	Difficulty Using Online Catalog: Yes No.	%	No No.	%	Sometimes No.	%
Very prepared	9	18.4	71	34.8	22	20.2
Somewhat prepared	25	51.0	101	49.5	58	53.2
Not at all prepared	15	30.6	32	15.7	29	26.6

Chi – square = 14.04; $df = 4$; $p < .01$; Cramer's $V = .139$

TABLE 14
NUMBER OF YEARS IN UNITED STATES
BY DIFFICULTY USING ONLINE CATALOG

Number of Years in United States	Difficulty Using Online Catalog: Yes No.	%	No No.	%	Sometimes No.	%
Less than 1 year	19	22.1	33	38.4	34	39.5
1–3 years	23	13.1	106	60.6	46	26.3
4–6 years	6	7.5	53	66.3	21	26.3
6 years or more	0	0	13	65.0	7	35.0

Chi – square = 20.72; $df = 6$; $p < .01$; Cramer's $V = .169$

tionship between the number of years the international students had been in the United States and their difficulty using the online catalog is represented in table 14. Here, the hypothesis of interest is that international students who have been in the United States longer might not experience difficulty using the online catalog. The cross-tabulation shows that 38.4% of respondents who had spent less than one year in the United States did not have difficulty with the online catalog, while 22.1% did. However, of those who had spent one to three years in the United States, 60.6% did not experience difficulty and only 13.1% did. Further, of those who had already spent four to six years in the United States, 66.3% did not have difficulty and a very small percentage (7.5%) did. The null hypothesis can safely be rejected since the observed significance level is 0.002; yet the strength of the association is fairly low, with a Cramer's V value of 0.169.

IMPLICATIONS

It is important for any library to examine the characteristics of its user population and to develop and implement services appropriate to the users' needs. The analysis presented here describes certain characteristics of the international student population at a large university and illustrates a number of the group's use patterns within the context of a large, highly automated library system. The results of the study demonstrate that a basic, but crucial factor to be considered when planning for bibliographic instruction activities, is the status of international students. It is only natural to aim course-integrated library instruction programs at undergraduates; but libraries must be aware that there are other new students with special needs who may not be taking advantage of the most commonly offered services and instruction activities. If most of the international student population are graduate students, with advanced knowledge of the literature in their fields, (yet perhaps unfamiliar with technological advances in bibliographic access and the services offered by large United States academic libraries), then a distinct avenue must be created to reach them. This must be distinct from the process aimed at undergraduates. At Illinois the Office of International Student Affairs is more than happy to include the library on its agenda as a major component of the orientation for new international students on campus. A special opportunity such as this is an excellent way for librarians to present the library and themselves in a positive light, to provide an introduction to bibliographic access systems and basic services, and to extend an invitation for further instruction.[12]

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9. Ibid., 99.
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11. The author worked closely with the Graduate School of Library and Information Science's Library Research Center to design questions of consistent format for ease of completion by the survey participants and to ensure accurate coding of the data.
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A Library Committee on Diversity and Its Role in a Library Diversity Program

Kristin H. Gerhard and Jeanne M. K. Boydston

The library profession has been committed to affirmative action, yet it has been historically difficult to convert that philosophical commitment into activity. Academic libraries have paid uneven attention to affirmative action programs over time. This paper examines the historical role affirmative action programs have played in academic libraries, and the shift in focus in recent years from affirmative action to more broadly based diversity programs. It then describes the contribution a library staff may make to these programs by examining the evolution and function of Iowa State University Library's Committee on Diversity.

Programs that deliberately seek to increase diversity have a particular importance for libraries within colleges and universities. At a conference on the multicultural library, John F. Noonan, president of Bloomfield College in Bloomfield, New Jersey, describes libraries as "a mirror of society as well as an image in front of the mirror."[1] Some students have direct contact with a minority professor, but women, racial minorities, and the disabled working in libraries have higher visibility for the general undergraduate population than do their counterparts in classrooms. In this position "in front of the mirror," these librarians have a unique opportunity to serve as role models, and as a clear demonstration of their institution's commitment to diversity. Affirmative action programs within libraries, then, may well affect colleges and universities.

Librarianship has been committed to affirmative action, yet it has been historically difficult to convert that philosophical commitment into activity. This article examines the role affirmative action programs have played in academic libraries over time and the shift in focus in recent years from affirmative action to more broadly based diversity programs. It then describes the contribution a group of library staff may make to these programs by examining the evolution and function of Iowa State University Library's Committee on Diversity.

Throughout this paper, the authors use the terms *affirmative action*, *diversity*, and *multiculturalism*. Affirmative action programs seek to increase the number of qualified women, minority, and disabled individuals, as well as disabled or Vietnam era veterans hired by an institution. These programs have been the traditional means for achieving diversity, which the authors understand as the representation of, recognition of, and support for more than one kind of life experience within the university. Multiculturalism refers to one specific aspect of diversity: the representation of, recognition of, and support for more than one culture within the institution.

FROM AFFIRMATIVE ACTION TO DIVERSITY PROGRAMS

In 1978, Elizabeth Dickinson and Margaret Myers investigated affirmative

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action and American librarianship. When they asked survey respondents to provide a prognosis for affirmative action in librarianship, "answers ranged from cynical to relatively optimistic. . . ."[2] Their evaluation of trend data gave a similarly ambivalent picture for the future of affirmative action. They pointed to the growth of minority and women's professional groups, "greater activity in the area of women and ethnic studies and the burgeoning of affirmative action literature" as indicators of raised consciousness regarding affirmative action.[3] The authors believed these subjective gains would take time before they had objective effect and registered as economic gains. They concluded that affirmative action programs in libraries would grow modestly and would take time to do so.

Twelve years later, Cliff Glaviano and R. Errol Lam suggested that the cynics may have been right. They wrote that affirmative action has not been a primary goal of the library profession since the early 1980s, and that now is the time to reorient the profession. They state:

> [while] it is not the primary function of academic libraries to define the multiethnic society or the methodologies the university might employ to educate for the pluralistic society, the libraries can be very influential in establishing and demonstrating a pluralistic environment from which the information needs of all campus cultures might be serviced.[4]

A number of strategies are outlined that libraries may use in promoting this environment. Ideas from the business community include provision of cross-cultural training for all company employees, with the intention of improving communication and increasing sensitivity to differences. The authors also note particular support given to minority employees, wherein they "are given instruction in corporate values and behavioral norms of the organization to which they have been recruited."[5]

Other ways to promote a multiethnic society are creating displays, building collections in multicultural areas, and improving the diversity of library staff and services that support the library.[6] Large budgets are not necessary for these programs to succeed. In creating such an effort within the library, Glaviano and Lam suggest that librarians draw on methods that have worked in dealing with other library issues, including networking and activism.

This kind of change requires work. As the authors note, academic libraries in predominantly white institutions are part of the larger institutions they serve. Attitudes held in the library probably reflect attitudes held in the wider university. Staff may not feel that they are responsible for addressing racial diversity on campus. Glaviano and Lam conclude:

> changes in practice that move the profession toward real improvement in affirmative action will probably originate with underfunded individuals or small groups in local academic libraries.[7]

The Association of College and Research Libraries (ACRL) Task Force on Recruitment of Underrepresented Minorities issued its final report, *Recruiting the Underrepresented to Academic Libraries*, in November 1990. The opening lines of the report's introduction highlight the need to refocus library efforts in this area: "Attention to the recruitment and advancement and retention of underrepresented groups in libraries is an idea whose time has come—again!"[8] The report notes the waning of this kind of recruitment in the 1980s and a lack of attention to retention or advancement. The report identifies three targets for change: institutional commitment to change and accountability, personal and institutional racism barriers, and barriers to advancement and retention. It recommends sixteen specific actions ACRL can take.

In response to the task force's report, the ACRL Executive Committee adopted a resolution on cultural diversity in libraries. The resolution states that ACRL is "committed to fostering equality and promoting diversity within the library profession as a whole and specifically within academic libraries."[9] The committee also voted to establish an ACRL Standing Committee on Racial and Ethnic Diversity. The committee's charge is to:

initiate, advise and mobilize support for appropriate action related to issues of racial and ethnic diversity in academic librarianship including the recruitment, advancement and retention of underrepresented groups to academic librarianship; and the promotion of quality academic library and information services for members of racial and ethnic groups.[10]

Increased focus on diversity issues within ACRL is further evidenced by *College & Research Libraries News*' recent inauguration of a regular column called "Racial and Ethnic Diversity: Information Exchange."

In 1990, the Association of Research Libraries (ARL) published a number of documents dealing with affirmative action and diversity topics. They included flyers on affirmative action policies, minority recruitment and retention, and cultural diversity programs. The introductions of these flyers summarize the results of surveys of ARL member libraries' programs in these areas.

The introduction to the affirmative action flyer suggests a significant shift in emphasis in recent years, noting that "affirmative action goals are already moving from being a separate agenda to joining the agenda for diversity."[11] This recent shift in emphasis is further illustrated by the documents contained in the flyer on cultural diversity. The introduction to this flyer speaks of business' new valuation of diversity, noting that "demographic changes occurring during the next ten years are expected to affect businesses more than any other development, including technology. America's businesses are allocating significant resources to multicultural awareness training."[12] Responses to the cultural diversity programs survey indicated a wide variance among ARL libraries. Some have no diversity programming at all, while others have well-established, comprehensive programs.

The cultural diversity flyer also addresses some barriers to creating these programs. Building strong programs requires a good understanding of diversity issues, an overall strategy, support from all levels of the organization, and the ability to deal with funding limitations. Finally, "librarians working in this area must recognize that support for diversity programs is not universal. . . . conflicting views must be acknowledged and debated."[13] A recent article by Patrick A. Hall in *American Libraries* addresses one such viewpoint.[14]

Roberto G. Trujillo and David C. Weber encourage academic libraries to work proactively on cultural diversity issues. They suggest that librarians turn their attention "beyond simple access for minorities to the more difficult issues of participation and collaboration."[15] They outline a number of actions libraries can take, but emphasize the importance of maintaining a vision of an environment where all individuals are valued and "where full participation and partnership are the norm."[16] They believe that all academic librarians should work to move their libraries toward the realization of that vision:

> We all share a responsibility to improve those library conditions that today we deplore. As our profession develops over the decade ahead, ethnic and racial minority groups must be brought into full partnership—they must be valued both for their professional expertise and for the exceptional personal qualities they bring to their work and their profession.[17]

DIVERSITY AND ACADEMIC LIBRARIES TODAY

The recent rise of interest in diversity is further evidenced by a number of conferences emphasizing this topic. For instance, a 1991 preconference sponsored by ACRL's Bibliographic Instruction Section addressed bibliographic instruction in a multicultural environment. The forum on the multicultural library, held at Bloomfield College in 1990 and mentioned above, is one of many such meetings held locally or regionally in the past year. A recent presentation at an ALA poster session received more than fifty requests for further information. In order to understand the present state of affirmative action and cultural diversity programming, librarians need to look at current programs in academic libraries.

Affirmative action programs are an important component of the larger diversity effort. Who is responsible for affirmative action today in hiring for academic libraries? Since the search process is the door through which more diverse librarians must come, it is an important gateway to examine. Jeanne M. K. Boydston surveyed ARL libraries in the United States to examine their hiring practices in regard to equal employment opportunity and affirmative action. She found that all respondents had some university-level unit dealing with equal opportunity and affirmative action on campus. Still, more than half the respondents had a second agency or individual within their library with responsibility for equal employment opportunity and affirmative action.[18] The entity with this responsibility was either an affirmative action officer or an affirmative action committee.

As academic libraries have worked to build environments more supportive of diversity, some have made specific documents related to their programs available. The University of Michigan at Ann Arbor has released two parts of its diversity document entitled "Points of Intersection." The Ann Arbor program includes staff education and a full-time diversity librarian, as well as a task force on diversity. "Points of Intersection" articulates a broad basis for academic libraries' contributions to a universitywide multicultural effort.

Many programs are described in more detail in the flyer on cultural diversity programs in ARL libraries. Examples include the creation of special positions, such as multicultural services librarian and cultural outreach librarian, at a number of universities; the establishment of committees or task forces at other universities; and the establishment of workshops to raise staff awareness and emphasize cross-cultural training.[19]

To summarize the main points made in the literature, in higher education as in business, attention is increasingly focusing on issues of diversity rather than on affirmative action. Although affirmative action programs remain one of the crucial paths by which institutions may increase their diversity, these programs are still a source of ambivalent feeling for some librarians. The mechanism for implementing affirmative action policies varies from institution to institution, as does the approach to diversity programming. In general, administrative support, systemic thinking, and low budget requirements characterize successful programs.

AFFIRMATIVE ACTION AND DIVERSITY AT IOWA STATE UNIVERSITY LIBRARY

The affirmative action or diversity program at Iowa State University Library has a number of components. It is based on a firm commitment to diversify the university's faculty, which is seen in ongoing recruitment and staff development programs. Some specific examples include recruitment trips to library school campuses, educational and awareness sessions with staff, and meetings of the university's Steering Committee on Diversity. The library also participates in the university's larger diversity program. For example, the school has a special funding program, administered by the university provost, that supports hiring minorities in targeted areas. Additionally, the university has had an Affirmative Action Committee, now called the Library Committee on Diversity, since the late 1970s. Its longevity makes it somewhat different from similar committees at other institutions, and gives the library the opportunity to look at what has and has not worked well over time. What follows is a description of its evolution.

THE AFFIRMATIVE ACTION COMMITTEE

The Library Affirmative Action Committee was created by the dean in 1977 in response to a call for each large unit on campus to have such a committee. Initially, these committees were part of a universitywide Affirmative Action Council. When the council ceased to meet, the unit-level committees across the campus were largely phased out. The exception to this was the library group. The committee consisted of faculty librarians and paraprofessional staff.

The main responsibility of the committee was to work with library faculty search committees. A representative from the Library Affirmative Action Committee was appointed to each search committee as an ex officio member. The representative's tasks were:

- to provide each member of the search committee with basic information about equal opportunity employment and affirmative action;
- to monitor search committee activities for fairness in terms of equal opportunity law;
- to encourage consideration of candidates protected under affirmative action guidelines;
- to hold exit interviews with candidates; and
- to report in writing to the dean of library services at the conclusion of each search.

The desire that the interview process be fair for each candidate comes through clearly in reporting letters, in memos distributed to search committee members, and in librarywide memos.

These tasks were sometimes uncomfortable for the representative and the search committee members, but over time fewer illegal or inappropriate questions were asked. Affirmative action representatives learned to handle illegal questions in a number of ways, such as rephrasing questions, telling candidates they did not have to answer illegal questions, and talking privately with colleagues who asked unacceptable questions. As a result of education by the Affirmative Action Committee and the library administration, adoption of standard interview procedures, and changes in societal attitudes as a whole, the incidence of illegal questions in interviews at the university's library seems fairly low today.

A fault of the committee was that its members essentially became enforcing agents, acting more reactively than proactively, because the committee was focused solely on the search process. The committee was fairly limited in its outreach to the library staff as a community. The committee members thought that they should continue to monitor individual searches, but that a broader focus was needed in order to become more effective. The committee needed to move away from being a regulatory committee and toward being an educational committee without abandoning its responsibility to equal employment opportunity and affirmative action in the library.

The committee began looking at this possibility in 1990, the year the university's new dean of library services began examining all existing committees within the library to see how the library's work was structured and how it might better be accomplished. This was a good opportunity for the committee to identify what goals it held in common as a group and with the library administration, and whether there might be some alternative ways to accomplish those goals that had not been pursued previously.

Building strong programs requires a good understanding of diversity issues, an overall strategy, support from all levels of the organization, and the ability to deal with funding limitations.

The committee's goals were revised to reflect the general shift, identified in the literature, from a focus in higher education on affirmative action to a focus on broader issues of diversity. The result has been a revitalization of the committee's role on search committees and a strong emphasis on staff education for diversity. One reflection of this shift in emphasis was the changing of the committee's name to the Library Committee on Diversity. Also, the committee's documents and manual have been completely revised (see appendix). The "Points of Intersection" documents from the University of Michigan were used in the revision process.

The committee is still comprised of professional and paraprofessional staff.

This was appropriate under its former charge because paraprofessional staff sit on some search committees and have the opportunity to meet with candidates and provide feedback. The new makeup of the new committee is an even greater advantage because it extends educational efforts toward all staff members. In the spring of 1991, a workshop was offered to supervisors of paraprofessional staff, and one member of the committee participated in the creation of a manual for those who supervise students. Also, Search Committee information packets have been revised, and the committee and the dean now share responsibility for emphasizing equal opportunity and affirmative action to faculty search committees. The dean addresses those issues with the Search Committee in the initial meeting, and a representative from the Committee on Diversity maintains a focus on these issues throughout the search process.

Training materials and programs for library staff members have been developed and continue to evolve as the committee learns more about diversity issues. Committee members, for instance, have become more aware of the wide spectrum of views about diversity, with all the shadings of opinion possible being held by one or another members of the staff. They, also, have learned more about training—what works and what does not work—from experience, from the literature, and by having one member of the committee receive training from an external consulting firm specializing in diversity issues. Self-education as well as education for other library staff continues to be a part of the committee's responsibility.

Having reformulated its charge and refocused its energies, the committee had a number of questions about the environment within which the librarians would be working. Were the proposed changes appropriate? Were they useful? Would they meet library needs? To answer these questions, the committee revised a survey of staff attitudes and perceived training needs regarding equal employment opportunity and affirmative action that had been used by the Affirmative Action Committee during its first year. The survey was administered to the entire library staff. The goal was to take the temperature of the library's environment and assess staff need for more information about equal employment opportunity and affirmative action, broadly conceived, in the library.

The questionnaire return rate of 55 percent gave a statistically unrepresentative sample. However, the broad range of opinions expressed by the respondents was, and continues to be, helpful in evaluating the program. The implications of the results lie mainly in the area of education.

Diversity issues are difficult ones for many people. Staff members with concerns need a safe, constructive forum within which to work on these issues both intellectually and emotionally. Individual, informal contacts provide one such forum. Some staff may need the presence of a committee member to stay within bounds when interviewing candidates. This is because they are either new and unaware of the legal boundaries or of the university library's seriousness in adhering to them, or because they are uncomfortable with equal employment opportunity and affirmative action guidelines and have resisted past education. Many staff are openly interested in issues of diversity and want to know more.

The results support the need for continuing education, the usefulness of an active voice supporting affirmative action programs, and the value of diversity among the staff. The results underline the need for librarians to keep working at improving the environment within which they work. In discussing their staff education workshop program, the Ann Arbor Graduate Library's documents concur with the authors' finding for the need for ongoing education. The documents state:

> To have the concept of diversity truly take hold, the education process must be an ongoing one. Awareness, enlightenment, and the ability to practice what is learned in a safe environment—supportive of questioning and vulnerability—must be available to all. This is essential to any diversity effort and most directly

confronts both individual and institutional discrimination.[20]

CONCLUSIONS

In his discussion of the role of campuswide affirmative action committees, Daniel C. O'Rourke suggests that ". . . committees can be most effective in helping accomplish organizational goals including affirmative action (AA) and nondiscrimination goals (perhaps the most effective resource)."[21] His experience is that the existence of such a committee helps to focus campus attention on affirmative action, and can motivate the affirmative action officer by sharing the work, supporting affirmative action goals, keeping affirmative action activity broad, identifying new issues, and finding new approaches to old issues.[22] In addition, the authors have found the benefits in having such a committee in the library to include contributing to the creation of an affirming environment, increasing awareness and knowledge about equal employment opportunity and affirmative action among the library staff, assuring a goodwill effort is made in recruiting minorities and women, adding credibility to the recruitment process in the eyes of library staff, and helping to ensure legal compliance with appropriate laws and guidelines.

The authors' experience backs up Glaviano and Lam's observation that a library doesn't need a big budget to provide local programs; Iowa State University Library has no separate budget. Glaviano and Lam also point out the importance of continuous support by the library administration for the development of cultural diversity programming, another conclusion with which the authors concur.[23]

O'Rourke's final advice about affirmative action committees is a good reminder to those already engaged in this kind of endeavor, as well as those who are just beginning:

> Be patient. Effective affirmative action committees and programs will not spring up overnight. It may take years. Work at it, work with it, and be content with incremental gains. The committee will grow more effective step by step.[24]

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APPENDIX
COMMITTEE DOCUMENTS
COMMITTEE ON DIVERSITY

Purpose

The Committee exists to support the commitment of the library to equal opportunity and affirmative action by providing formal education, by assisting library staff in the hiring process, and by serving as an informal resource.

Mission and Responsibility

The Library Committee on Diversity works with the Dean/Department Executive Officer (DEO) to develop and promote a diverse work force within the ISU Library. The creation and maintenance of a community of women and men that is multicultural, multiracial, multinational and respectful of the dignity of all persons are essential to the educational mission of this library. The Committee's role is:

- To maintain a focus on equal employment opportunity and affirmative action within the Library.
- To inform and educate Library personnel concerning equal employment opportunity and affirmative action.
- To help create a work environment in which all personnel are able to develop to the fullest extent of their potential.
- To assist selection committees in the recruitment of members of protected classes for professional positions, and to serve as a resource for those who hire support staff.

Organization

- The Committee will consist of not more than six members who will be appointed by the Dean to two-year terms, and may be reappointed once. Members will not ordinarily be reappointed for more than four consecutive years.
- The Committee selects its own Chair subject to approval of the Dean of Library Services. The Chair will serve a term of one year and may be selected to serve up to four successive terms.
- The Committee will be responsible to and report as needed through its Chair to the Dean/DEO.
- The Chair will recruit new members for the Committee, with recommendations of the Committee, as current members resign. Vacancies should be filled as soon as possible.
- Meetings of the Committee will be called as needed by the Chair, the membership of the Committee, or the Dean of Library Services. Brief minutes of each meeting will be

routed to members. A permanent file of most recent Committee papers will be in the custody of the Chair, with older materials placed in the Archives collection.

ROLE ON SELECTION COMMITTEES

- The Committee will designate a Committee on Diversity member to serve as a non-voting member on each selection committee. Committee on Diversity members will not represent the Committee on selection committees for positions within their own departments.
- The Committee representative will serve as a resource and advocate for equal opportunity and affirmative action issues, providing the search committee with pertinent background information and helping the group to understand and follow the Library's commitment to equal opportunity and affirmative action. The representative will speak to issues relevant to equal opportunity/affirmative action in the search process and bring to the attention of the chair of the search committee, when necessary, activities which infringe upon established policy. (See checklist below)
- The Committee will distribute packets of affirmative action information to search committee members at or before the first meeting of the search committee.
- In an effort to assist the Library in better effecting the principles of equal employment opportunity, the Committee representative is provided a fifteen-minute period at the end of the agenda with each candidate.
- The Committee representative will provide a written report to the Dean following each search, indicating whether or not equal opportunity and affirmative action guidelines were followed. Any concerns related to equal opportunity or affirmative action in a particular search are also addressed in this report.

GUIDELINES FOR THE COMMITTEE ON DIVERSITY REPRESENTATIVE ON A SELECTION COMMITTEE

Search Committee Responsibilities

- Contact chair of search committee.
- Get copies of EEO/AA information packet (Library Administration Office will make copies; Chair keeps original on file).
- Distribute information packets at first meeting of search committee, when possible, after Dean has spoken on AA.
- Explain role of Committee representative to the search committee.
- Advocate casting a wide net.
- Advocate particular attention to Affirmative Action candidates as appropriate throughout the search process.
- Attend all committee meetings; arrange for substitutes as necessary.
- Maintain a file with all documents relevant to search.
- Submit written report to Dean of Library Services, copy to Committee on Diversity file.

Campus Interviews

- Attend search committee meetings (including lunches with the committee) with each candidate. Attend all open library meetings (formal and informal) for each candidate.
- Conduct an exit interview with each candidate.

Meetings Not Attended As Committee Representative

- One-on-one telephone calls to references.
- Dinners.
- Nonsearch committee meetings with candidate (section meetings, Administrative Council meetings, etc.).
- One-on-one meetings.
- Receptions.

Interdisciplinary Work and the Information Search Process: A Comparison of Manual and Online Searching

Laura M. Bartolo and Timothy D. Smith

Library users' research interests and needs are becoming increasingly interdisciplinary. This type of research presents searchers with obstacles that differ from disciplinary research. Using the information search process (ISP) developed by Carol C. Kuhlthau as a theoretical model, this study compares the impact of manual and online search methods on the interdisciplinary search task in terms of the relevance of retrieved items, user effort, user satisfaction, user confidence and future use. This comparative investigation examines two senior-level journalism classes researching judicial decisions related to the mass media. One class used printed legal reference sources; the other class used LEXIS, a full-text legal database. The results of this study indicate that online search methods are more effective than manual search methods when users are working outside their areas of specialization.

Some of the most provocative topics of debate within the academy today concern the notions of disciplinary boundary lines and interdisciplinarity.[1] These discussions are not totally new, nor are the challenges facing researchers embarking on these new or blurred frontiers. In 1972 M. E. Freeman noted, "For half a century scientific progress has developed toward interdisciplinary and broad scope technologies. At the same time the information resources necessary for orderly scientific development have become increasingly fragmented and specialized. The multidisciplinary or interdisciplinary scientist has found it more and more difficult to locate precisely the information he needs."[2] Freeman's comments highlight two important and conflicting factors in interdisciplinary work: the broad research interests of scholars and the development of highly specialized information resources. Today academic librarians frequently encounter these features when they help library users investigate such broad topics as international politi-

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cal economy as well as search such specialized resources as *Thesaurus Linguae Graecae* (*TLG*).

Though there have been many articles in library journals addressing interdisciplinary topics, most have focused on selecting materials for these areas.[3] Other articles have addressed such issues as subject overlap in online databases, the impact of new trends in higher education, citation analysis, and bibliographic instruction for interdisciplinary courses.[4-7] However there has been no direct study of users researching interdisciplinary projects and the challenges they encounter. While the problems of interdisciplinary work are not entirely new, advances in technologies have altered their impact on researchers.

This paper describes a comparative study of two senior-level journalism classes. One class employed manual search methods to identify and evaluate judicial decisions relating to the mass media; the other class used online search methods for the assignment. Following the information search process (ISP) developed by Kuhlthau as the theoretical model, the authors investigate effective search methods for library users, particularly novice users, when working on interdisciplinary subjects outside their area of specialization.[8] Specifically, this study addresses how the search method affects the relevance of retrieved items, user effort, user satisfaction, user confidence, and future use. However, before describing this investigation, it is necessary to define *interdisciplinary work* as it is used in this study and to highlight the theoretical principles of ISP as it relates to the challenges of interdisciplinary work.

INTERDISCIPLINARY WORK

As numerous articles have argued and as Julie Klein thoroughly documents in her recent book, *Interdisciplinarity*, interdisciplinary work is not limited to scientific fields but is found across all disciplines of knowledge.[9] Academic librarians are increasingly seeing the proliferation of interdisciplinary work — when assisting researchers who conduct literature reviews across disciplinary lines, in selecting new monographs and journals to support interdisciplinary research, and in preparing BI for interdisciplinary curriculum.

Considerable discussion as well as misunderstanding exists about the precise meaning of the term *interdisciplinary work*. Julie Klein defines interdisciplinarity as "the ideas of a *unified* science, general knowledge, synthesis, and the integration of knowledge,"(the authors').[10] Yet interdisciplinarity has also been used to convey the awareness of disciplinary differences. Stanley Fish has stated, "It is in the name of difference — of the recognition of perspectives, materials and interests excluded from the disciplinary focus — that one calls for interdisciplinary work, for work that insists on looking into the other fellow's back yard."[11]

In his discussion about the nature of interdisciplinary work, Fish further notes that researchers "borrow" from other fields in order to meet their immediate research needs and relate that work to their own discipline.

This study adopts Fish's definition of interdisciplinary work and examines the searcher's effectiveness in disciplinary backyard borrowing. In his discussion about the nature of interdisciplinary work, Fish further notes that researchers "borrow" from other fields in order to meet their immediate research needs and relate that work to their own discipline. "One begins with a 'sense of task' derived from some enterprise, some recognizable project, and within that sense one makes use of the materials that come to hand, including materials generated by other enterprises, but materials that will be received (and perceived) in the form appropriate to the job of work you are now doing."[12] Librarians working one-on-one with individual library users or with a class through BI must take into account these disciplinary differences. For example, it is equally important for the librarian instructing journalism students in legal research methods to relate legal research to the field of journalism as well as it is to outline the principles of legal research.

Interdisciplinary work presents library users with challenges different from those of disciplinary research. When researchers from one discipline borrow materials from another discipline, they must borrow intelligently to ensure the success of their project. First, users embarking outside their territorial lines must be aware of current developments in other disciplines. Second, this awareness of new developments encourages a sensitivity to where different but related disciplines can converge. Finally, in interdisciplinary work the user must identify the appropriate terms and principles to borrow from another discipline. Once the user assesses the perspectives and materials that are needed and from what disciplines they can be borrowed, then the searcher stands on firm ground ready to embark on the enterprise.[13] To best understand how one addresses the challenges of interdisciplinary research—awareness of new developments, understanding of common ground, and determination of relevant concepts and findings—it is necessary to investigate information seeking behavior from the user's perspective.

INFORMATION SEARCH PROCESS

As Carol C. Kuhlthau defines it, the "information search process (ISP) is the user's constructive activity of finding meaning from information in order to extend his or her state of knowledge on a particular topic or problem. It incorporates a series of encounters with information within a space of time rather than a single reference incident. Uncertainty and anxiety are an integral part of the process, particularly in the beginning stages."[14] ISP primarily analyzes the library user's quest for information. People synthesize new information based upon what they know or have experienced, and they construct meaning from the information they come upon. Kuhlthau identifies six stages in the information search process:

1. The initiation stage when users recognize the need for information and, conversely, their lack of knowledge.
2. The selection stage when users identify and select a general topic or approach.
3. The exploration stage when users orient themselves to the topic in order to form a stand or point of view.
4. The formulation stage when users select a focus or perspective for the topic.
5. The collection stage when users gather information related to the focused topic.
6. The presentation stage when users complete the research and prepare the finalized work.

ISP recognizes the psychological as well as intellectual activity involved in the endeavor of seeking and gathering information. In the first four stages of ISP, confusion increases as inconsistencies and incompatibilities of new information relative to what was previously known are encountered. If searchers experience difficulty locating information about their topic, they begin to doubt the relevance of the newly found information and may abandon their project entirely.

Reference librarians working with individual library users or with an entire class frequently encounter searchers with undefined projects who express frustration and confusion about their work. Relatively minor problems, such as what periodical indexes to use, how to search them, and where to find journal articles, can appear insurmountable to the library user at that stage. Kuhlthau observes that two competing elements foster this sense of anxiety. The individual is engaged in seeking information while at the same time formulating the research project. This dilemma is heightened by the searcher's lack of familiarity with the organization of information.[15] Reference librarians must recognize that until the user begins to identify the needed resources successfully and to focus the project, the entire work can be in jeopardy.

While Kuhlthau contends that all searchers undergo some degree of anxiety, those involved with interdisciplinary projects risk experiencing an even greater sense of frustration and anxiety than those involved with disciplinary work. The duality of the interdisciplinary search task—the need to find information and the lack of knowledge of another discipline—potentially heightens the level of uncertainty and anxiety for the researcher.

Interdisciplinary work, then, presents different challenges for researchers from disciplinary work. Individuals working in another discipline need to be aware of new developments in the other field. In addition, they need to understand the common ground between the two disciplines and to determine relevant concepts and findings to borrow from the other discipline. Given the challenges of interdisciplinary work and in light of ISP, how do manual or online search methods affect the successful completion of interdisciplinary projects?

RESEARCH QUESTIONS

In general, this study examines how the search method used to find relevant information affects the user's search process when working on interdisciplinary projects. It was the authors' hypothesis that searchers working on interdisciplinary projects who conduct online information searches meet the challenges of interdisciplinary work more successfully and develop better researched projects than those who employ manual information search methods. To test this hypothesis, we analyzed the results of student bibliographies of judicial decisions relating to mass media (faculty evaluated) from two senior-level journalism classes and questionnaires completed by the same students at the end of the course. Specifically, our research addressed the following questions:

1. Is there a difference between manual and online search methods in terms of relevant material retrieved for interdisciplinary topics (faculty evaluated)?
2. Are there differences between manual and online search methods for interdisciplinary topics in terms of the following indicators of anxiety: user effort (time required and ease of use), user satisfaction, user confidence (need for help), and future use.

RESEARCH METHOD

The subjects for this two-semester study were students enrolled in spring (manual group, N= 34) and fall (online group, N= 35) senior-level journalism classes, "Law of Mass Communication." These classes were chosen because students who generally enroll are journalism majors with little or no background in legal research.

The research assignment for both groups was a two-part project that required students to submit two bibliographies which located and evaluated judicial decisions pertaining to a particular topic on the mass media. The first part of the class assignment (preliminary bibliography) followed Kuhlthau's first four stages of ISP—initiation, selection, exploration, and formulation—where the students selected their topic, gathered information and focused their research project. For the preliminary bibliography, both the manual and online groups were required to find between twenty to twenty-five judicial decisions that the students perceived to be relevant to their research topic. A judicial decision was considered relevant by the faculty member if it was closely related to the legal issues involved in the research topic. This assignment focused on the students' ability to locate court cases on a particular topic using print materials or online databases.

The second part of the class assignment (final bibliography) involved Kuhlthau's last two stages of ISP—collection and presentation—where the students read the material listed on the preliminary bibliography and, based upon their reading, selected the material to be listed on the final annotated bibliography. For the final bibliography both the manual and online groups were required to select from the preliminary bibliography between four to ten judicial decisions they considered to be landmark cases in that area of law. The students were also asked to write detailed abstracts about each of the court cases they had selected. The purpose of this assignment was to go beyond the students' ability to find court cases. The preliminary bibliography measured the students' understanding of basic legal research. The final bibliography examined the students' understanding of legal principles by assessing the students' evaluation and description of judicial decisions.

INSTRUCTION AND TREATMENT

Instruction and treatment for the two groups—manual and online—were as similar as possible. Both groups had two one-hour legal research sessions and a one-hour tutorial session. On the second week of class the librarian conducted the first one-hour session and discussed the elements of legal research and the specifics about either manual or online research methods. The manual group was trained to conduct manual legal research—that is, to use print legal secondary sources, such as the *American Law Reports* series (ALR), legal digests, law review articles, and legal encyclopedias—in order to compile the bibliographies. The online group was shown how to conduct online searches using *LEXIS*, a full-text online database, in order to complete the bibliographies. During the third and fourth weeks of classes each student had a one-hour tutorial session with the librarian to learn individually how to use either manual or online research methods in relation to his or her specific topic. After the students handed in the preliminary bibliography, the librarian conducted the second one-hour session focusing on how to evaluate and abstract the judicial decisions.[16] After the students handed in the final bibliography, they completed a questionnaire which assessed user effort, user satisfaction, user confidence, and future use in relation to the search method and search product.

The following variables were examined in the study:

- Retrieval Size: The number of judicial decisions listed on each of the bibliographies.
- Precision: The number of judicial decisions that the faculty member judges to be relevant to the research topic. Precision is reported as a percentage of retrieval size.
- User Effort: The amount of time the students' projects involved and the degree of difficulty they perceived the project to be (on a six-point scale).
- User Satisfaction: The students' satisfaction with the results of their research project (on a six-point scale).
- User Confidence: The students' level of confidence in using either manual or online research methods (on a three-point scale).
- Future Use: The students' expected use of the research method in the future (on a four-point scale).

RESULTS

Preliminary and Final Bibliographies

- Retrieval Size: On average, the manual group found slightly more court cases than the online group. In the preliminary bibliography the manual group retrieved twenty-five cases and the online group identified twenty-two. In the final bibliography, the manual group listed five court cases; the online group cited four court opinions.
- Precision: In the preliminary and final bibliographies the faculty member evaluated the number of relevant court cases. For the preliminary assignment the faculty member judged a court case to be relevant if it discussed all or most of the legal issues involved with the student's topic. In the final bibliography the faculty member determined the number of landmark decisions listed and abstracted by the students. A judicial decision was considered a landmark case if it represented an important event or turning point in legal reasoning. The precision rate of relevant decisions is reported as a percentage of the retrieval size. T-tests, which compare the mean scores of two distinct groups, were used to analyze the results of the bibliographies.

TABLE 1
STUDENT MANUAL SEARCHING VERSUS STUDENT ONLINE SEARCHING: A COMPARISON OF OUTPUT VARIABLES

	Student Manual (N = 34)		Student Online (N = 35)			
Variable	Mean	SD	Mean	SD	T Value	Significance*
Bibliography 1: Identify 20–25 cases on your topic						
Retrieval size	24.76	1.06	21.94	12.04	1.38	NS
Precision	18.38%	.16	94.46%	.20	–17.08	p < .00001
Bibliography 2: After reading the cases, select 5–10 most relevant						
Retrieval size	4.32	3.19	3.54	3.6	.95	NS
Precision	20.59%	.41	48.57%	.51	–2.52	p < .014

* Significance is p < .05
NS = No Significance

In the preliminary bibliography, the mean number of relevant decisions for the manual group was 18 percent; the result for the online group was 94 percent. This difference is highly significant (T = -17.08, p .0001). The statistically significant difference between the scores of the online and manual groups on the preliminary bibliography verifies the success rate of online searches as a method of identifying relevant court cases on a particular topic by individuals with little or no background in a subject area (see table 1). In the final bibliography, the mean score for the manual group was 20 percent; the mean score for the online group was 49 percent. The difference between the groups on the final bibliography was significant (T = -2.52, p .05). Individuals with little or no background in legal research who use online research methods do a better job of understanding the legal principles involved with a court case and evaluating the importance of these legal decisions than those using printed methods (see table 1).

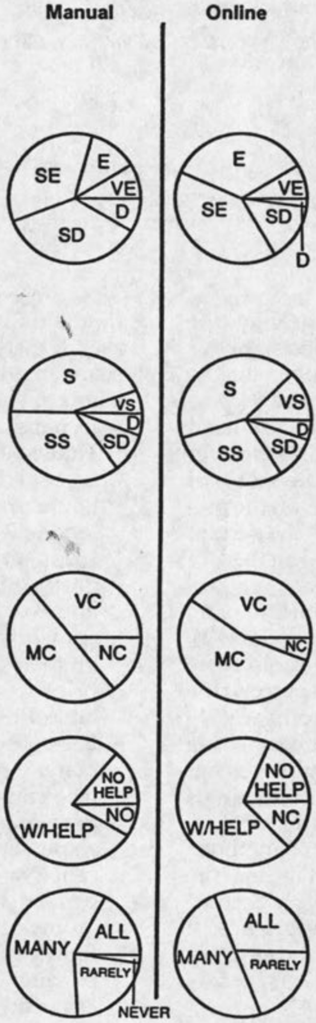
Questionnaires: Indicators of Anxiety

The responses in the questionnaires of the manual and online groups were compared in relation to the following variables: amount of time spent on the search, ease of using the search method, satisfaction with the results found by using the search method, confidence of using the search method alone or with the help of a librarian and expected future use of the search method.

- Time spent: Of the manual group, 46 percent (N= 15) reported spending six hours preparing and conducting their search; 34 percent of that group (N= 13) spent over ten hours. Of the online group, 88 percent (N= 31) spent three hours or less searching. A number of students from the manual group noted on their questionnaire that looking in printed materials took too long (see table 2).
- Ease of use: Thirty-five percent of the manual group (N= 12) found printed materials somewhat easy to use; 35 percent (N= 12) described them as somewhat difficult to use. Only 11 percent (N= 4) of the manual group found printed materials easy to use. In the online group, 34 percent (N= 12) found online searching easy to use; 40 percent (N= 14) found it somewhat easy and only 14 percent (N= 5) found it somewhat difficult (see table 2).
- Satisfaction: On the whole, both manual and online groups reported being satisfied or moderately satisfied with the results of their searching. From the manual group, 44 percent (N= 15) and 35

TABLE 2
FREQUENCY OF RESPONSES TO SURVEY QUESTIONNAIRE ABOUT TIME, EASE OF USE, SATISFACTION, LEVELS OF CONFIDENCE, AND FUTURE USE OF SEARCH METHOD

Variable	Student Manual Group (N = 34)		Student Online Group (N = 35)		Variable
1. Time Spent	6 hrs.		1 hr.		**Time Spent**
	N	%	N	%	
2. Ease of Use					**Ease of Use**
☐ Very Easy (VE)	3	9%	3	9%	☐ Very Easy (VE)
☐ Easy (E)	4	11%	12	34%	☐ Easy (E)
☐ Somewhat Easy (SE)	12	35%	14	40%	☐ Somewhat Easy (SE)
☐ Somewhat Difficult (SD)	12	35%	5	14%	☐ Somewhat Difficult (SD)
☐ Difficult (D)	3	9%	1	3%	☐ Difficult (D)
3. Satisfaction					**Satisfaction**
☐ Very Satisfied (VS)	2	6%	5	14%	☐ Very Satisfied (VS)
☐ Satisfied (S)	15	44%	14	40%	☐ Satisfied (S)
☐ Somewhat Satisfied (SS)	12	35%	10	29%	☐ Somewhat Satisfied (SS)
☐ Somewhat Disappointed (SD)	3	9%	4	11%	☐ Somewhat Disappointed (SD)
☐ Disappointed (D)	2	6%	2	5%	☐ Disappointed (D)
4. Confidence: Do search with help					**Confidence: Do search with help**
☐ Very Confident (VC)	12	35%	14	40%	☐ Very Confident (VC)
☐ Moderately Confident (MC)	17	50%	19	54%	☐ Moderately Confident (MC)
☐ No Confidence (NC)	5	15%	2	6%	☐ No Confidence (NC)
5. Confidence: Do search alone					**Confidence: Do search alone**
☐ No Help (NH)	5	15%	7	20%	☐ No Help (NH)
☐ With Help (W/Help)	26	77%	23	66%	☐ With Help (W/Help)
☐ No Confidence (NC)	3	9%	5	14%	☐ No Confidence (NC)
6. Future Use					**Future Use**
☐ All	6	18%	11	31%	☐ All
☐ Many	20	59%	17	49%	☐ Many
☐ Rarely	7	21%	7	20%	☐ Rarely
☐ Never	1	3%	0	0%	☐ Never



percent (N= 12) reported being satisfied and somewhat satisfied, respectively. In the online group, 40 percent (N= 14) and 29 percent (N= 10) selected satisfied and somewhat satisfied, respectively. Fourteen percent (N= 5) from the manual group selected somewhat disappointed and disappointed while 14 percent (N= 5) from the online group selected very satisfied. A number of students from the online group further commented that their search method contributed to finding court cases quickly and helping to focus their research topic (see table 2).

- Confidence—alone and with help: Both groups were confident to moderately confident in using manual or online search methods alone or with the help of a librarian. In the manual group, 85 percent (N= 29) rated themselves as very confident or moderately confident to do the search with help; 15 percent (N= 5) reported no confidence. In terms of confidence to search alone, 15 percent (N= 5) selected no help. In the online group 94 percent (N= 33) described themselves as very confident or moderately confident to search with help while 6 percent (N= 2) expressed no confidence. Twenty percent (N= 7) selected confidence to search alone (see table 2).
- Future Use: Both groups of students were asked whether they would use their search methods in the future.

Of the manual group, 18 percent (N= 6) reported that they would always use printed legal materials while 32 percent (N= 11) of the online group responded that they would always use *LEXIS* (see table 2).

DISCUSSION

This study is unique in its comparison of manual and online searching. Previous studies have concentrated on users searching in their areas of specialization; such searchers produce higher precision rates using manual searching over online searching.[17] However, in this study, where searchers are working outside of their discipline, precision rates are higher for online searching. In terms of the duality of the interdisciplinary search task, the results of the study affirm that searchers without a background in legal research are more successful at finding cases and evaluating their importance by using online methods than by using print methods.

To complete the two bibliographies successfully, the students needed to find and evaluate court cases, even though they had no prior knowledge of law. This dual search task was further heightened because of the interdisciplinary nature of the project. The students needed to understand where the two disciplines—law and journalism—converged, what were the current developments in law that affected journalism, and what were the appropriate terms or principles. In light of the ISP, the superior performance of the online group over the manual group supports the authors' hypothesis that online search methods are more effective than manual search methods in helping researchers handle the challenges of interdisciplinary work to successfully complete their projects.

On average, the manual group found slightly more court cases than the online group.

Other research has recognized the presence of anxiety in users when seeking information.[18] ISP recognizes that uncertainty and anxiety are fundamental elements of the search process and that users encounter inconsistencies and difficulties when seeking information. If the inconsistencies and difficulties are too threatening, the researcher may abandon a project entirely. This study's indicators of anxiety suggest that interdisciplinary researchers using online searching methods undergo lower levels of anxiety than those using print methods.

Comparing the two groups of searchers, this study found that online searchers expended less effort in terms of searching time and found online searching easier to use. These factors would help reduce frustration with the assignment. In addition, this group was more satisfied with the results of its project. The online group cited court cases that were not available in the local library, and consulted law review articles for this research project; the availability of full-text secondary materials on *LEXIS* encouraged the online group to consult more sources. This would seem to support other research that indicates that the best approach for novice users is to conduct an online search and then use print materials.[19] Searchers using online searching had greater confidence in their searching skills and were more apt to use online searching in the future. The study suggests that there is a relationship between the superior performance of interdisciplinary researchers using online searching methods and low levels of anxiety.

Comparing the two groups of search-This study on the effectiveness of online and manual research methods in interdisciplinary projects indicates further ways to investigate the relationship of interdisciplinary work and the library user. The research presented here focused upon novice users and interdisciplinary work. Further investigation needs to be made of expert users; do scholars involved with interdisciplinary projects perform better using online or manual searching methods? Also, this study should be replicated in other fields. Law is built upon a complicated, hierarchical information system. Other fields may not pose the same problems for the interdisciplinary researcher. An extension of this study, for example, might compare the results of philosophy scholars investigating the philosophy of science by using the online and print versions of *Chemical Abstracts*. In addition, closer examination of the perception of the task at the beginning of the process may reveal greater understanding as to the relationship of anxiety and the final product. Lastly, a more detailed study of the elements of online searching may illuminate how this type of searching relates to the challenges of interdisciplinary work.

CONCLUSIONS

Miriam Drake observed that "interdisciplinary teaching and research teams can benefit from the input of a librarian who acts as an organizer, integrator, and interpreter in helping to bridge language and literature gaps."[20] In order for librarians to play a more active role in the process of interdisciplinary work, librarians must investigate this type of research as it relates to the theoretical and methodological approaches in library science. The proliferation of information and avenues for retrieving information have contributed to blurred boundary lines for all subject areas and it is becoming increasingly common for all library users to venture into subject areas outside their specializations. Further research by librarians into the nature of interdisciplinary work will add to the discussion within the academy and will help foster self-reliant and successful searchers.

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Letters

To the Editor:

I am pleased to see that our recent article, "Journal Price Escalation and the Market for Information: The Librarians' Solution" (*College & Research Libraries* 53[Nov. 1992]: 523–35), provoked a worthwhile discussion of the application of economic models and academic research to real-world problems. I feel compelled to respond and clear up some misconceptions in the comments of Robert Michaelson, James Talaga, and David Lewis, "Letters" (*College & Research Libraries* 54[Mar. 1993]: 173–76).

First, although I, unlike David Lewis, believe that the invention and improvement of the photocopier have contributed to an increase in serials prices, I have recently been convinced that the increase in the number of faculty over the past two decades has also contributed to this problem. This is the argument suggested by Roger Noll and W. Edward Steinmueller (*Serials Review* 18[1992]: 32–37) and what I believe David Lewis refers to in his letter as a change in the "scale and scope of scholarship."

Second, we state three times in the text of the article that publishers maximize profits, which Lewis and Talaga seem to have overlooked in their reading. However, the diagrams and tables do not use profit maximizing points in order to maintain the simplicity of the argument for using Ramsey prices in this market. It is standard to ignore profit maximizing prices when illustrating Ramsey taxes in most undergraduate public finance textbooks (for example, *Public Finance* by David Hyman, Dryden Pr., 1993, 402), since the results do not change regardless of the prices used. In the example from our paper, when profit maximizing prices are used in both markets ($48 for libraries and $23 for individuals, *not* $50 and $19 as Talaga states), Ramsey prices will improve the welfare of society by increasing the welfare of libraries and their patrons by more than the decrease in the profits of publishers. Implementing Ramsey prices using photocopy prices changes the size and elasticity of demand in both market segments and results in a different set of profit maximizing prices for publishers. While using profit maximizing prices is technically correct, it significantly increases the complexity of the diagrams and the tables but does not change our results.

Ramsey prices are standard fare for public finance economists who analyze optimal tax policy. Clearly, librarians have a more limited set of tools than governments do. In this case, the price of photocopying appears to be the only tool librarians have to implement Ramsey prices.

What will happen if the price of photocopying for faculty is raised is debatable. Unlike Talaga and Lewis, I feel that an increase in photocopy fees will have an effect on the volume of faculty photocopying. While faculty typically do not pay for their photocopying, university deans and department chairs do make faculty aware of budget restrictions through different mechanisms to share university resources. Unlike Talaga, I do not feel that publishers can simply increase their prices to capture these photocopy profits. Talaga's argument assumes that university administrators would not decrease library resources to offset the increase in photocopy revenues and that libraries now value the heavily photocopied journals more than before because these are now the revenue-generating journals. Would the librarian's assessments of the value of a journal change because that journal is now a money-maker?

Finally, unlike Robert Michaelson, I feel that we are better off using time-tested models from economics to analyze economic problems. Is Michaelson suggesting that the alternative is to use subjective speculations and anecdotal evidence to find the solution to this problem?

This is precisely the problem of the "electronic journal solution" proposed by Michaelson, Lewis, and a host of others. Many librarians and academics see the low marginal cost of disseminating a copy of an electronic article and the fact that few electronic journals charge a fee as evidence that electronic journals will solve the current problem of serials price escalation. However, without rigorous economic analysis we must admit that we do not know what macro-economic savings or costs will result.

The simplest economic model of electronic journals is identical to a model of high-priced print journals that are not sold at a lower price to individual subscribers. In either case, if the quality and quantity of the journal are maintained and publishers make an economic profit, the journal will have a higher price. Replacing the library and individual subscriber markets with a single subscription that is received by the library or university computer center increases the value of the single subscription. An increase in the journal's value to the university enables the publisher to charge a higher price for the single subscription than in either of the two market segments. Electronic journal models that suggest lower prices always rely on a fundamental change in the market—such as more nonprofit publishers, universities retaining copyright, or a lower quality of refereeing—which are unrelated to the electronic technology.

Lewis and Michaelson seem convinced that electronic journals will dramatically lower serials prices and create a new market for the transfer of information. Their failure to use economic methods to support their arguments leaves me unconvinced. In fact, I am willing to bet both gentlemen $100 that the growth of electronic journals does not reduce the libraries' serials budgets at Northwestern University and the University of Connecticut over the next fifteen years.

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P.S. In response to the letter by Richard M. Dougherty and Brenda L. Johnson, I apologize for what they feel is a misrepresentation of their views. I mistakenly construed comments such as "Prices have increased well in excess of inflation rates and publishing costs," "If the *European Journal of Pharmacology* has to endure competition such as that experienced by *Time* and *Newsweek*, we would guess that subscription prices would not display the pattern we have observed over the past few years," and other comments (*Library Journal* [May 15, 1988]: 27–29) as implying they felt greedy publishers were to blame for price increases. I recommend their 1988 article to readers interested in this subject. In fact, I have my students discuss that article in my graduate class on the economics information.

To the Editor:

"Indexing Adequacy and Interdisciplinary Journals: The Case of Women's Studies," by Gerhard, Jacobson, and Williamson (*College & Research Libraries* 54[Mar. 1993]: 125–35), was of real interest to anyone working in an interdisciplinary field. I would like to commend the authors and the editor for making it available to us.

I would also like to suggest that we do have other access points to these and other significant journals in *UnCover*. I did a quick study of the titles in tables 1–6 and found that all but sixteen of the ninety-six titles are indexed in *UnCover*. The titles excluded are primarily those in lesbian studies, which may reflect new journal titles or lack of collection development in the area. On April 20, only two of the six titles from the lesbian list were included. However, all of the law journals are included as well as most of the titles from the other tables cited in the article. Presently, two major library systems holdings are being added to *UnCover*, those of the University of Hawaii and the University of Maryland. I expect that their holdings will increase the representation of women's studies journals. I imagine that many of the document delivery services in development will also give greater access to often neglected journals.

Access on *UnCover* includes key work and the ability to browse the tables of contents of the journals indexed. While full subject access is desirable, we all benefit from the technology that supports access to previously neglected journal titles.

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Book Reviews

Anthony M. Cummings and others. *University Libraries and Scholarly Communication: A Study Prepared for the Andrew W. Mellon Foundation.* Washington, D.C.: Association of Research Libraries, 1992. 205p. $8 (ISBN 9-918006-22-8). LC 92-44941.

This timely report on the present status of scholarly communication is a joint effort of the Mellon Foundation, which has demonstrated considerable interest in academic libraries for at least the past five years, and the Association of Research Libraries (ARL). The report is timely because, as any reader of this journal knows well, scholarly communication is now poised on the threshold of a new era. As a comprehensive yet succinct statement of the conditions surrounding scholarly communication and the evolving role of the academic research library, the Mellon study offers a welcome opportunity to take stock, reflect, and place very rapidly moving developments in a useful perspective.

The stated purpose of the book is to "describe the library landscape as it appears today, in its collecting, operating, financial, and electronic dimensions." The report addresses concepts such as those aptly labeled "ownership versus access" and "just in time versus just in case," and gives much space to publishing industry production and costs during the past few years. Clearly intended not for librarians, but rather for other parties with a stake in scholarly communication, it is nevertheless important for those of us within the profession to note the perception expressed by those outside the profession that "[t]he opportunity exists to rethink an entire set of relationships that, if reconstituted appropriately, can give libraries both new dimensions and an even more central role in the educational process than they have enjoyed in the past."

The report is divided into two distinct parts, each with several chapters. The first, "Historical Trends: Collections, Expenditures, Publications," is illustrated with forty-one charts and graphs and nineteen tables. The second part, entitled "Information Needs and New Technologies," synthesizes models of scholarly communication and describes their principal elements. The authors do a clear, thorough, and thoughtful job here, also acknowledging that changes are coming about so rapidly that this material is likely to date quickly. They are correct to offer this caveat, of course, but this section is a fine contribution toward the clarification of a set of situations that is unusually complex.

Documentation is heavy throughout the book, with much reliance on the current literature and on the files of the ARL. Data about libraries are taken from twenty-four ARL member institutions, half public, half private. It is the second part of this study that will be of particular interest to academic librarians because of its perceptive synthesis of trends, issues, and opportunities related to information technology, and also because of the tentative conclusions proffered in answer to questions fundamental to the future of scholarly communication. The report is sometimes bold in that regard. For example, it is a premise of the second section "that printed scholarly literature will continue to exist for a long time and that adequate bibliographic control is essential to scholarship." Another informed assumption is that peer review will continue to be central to the scholarly process, but that it may be expedited and expanded. Readers of this journal will be gratified to know that the book's authors are highly sensitive to the use of the word information throughout the text. Not surprisingly, the foundation has praise and great expectations for the value of the RLG Conspectus for the sharing of resources nationally; the foundation also considers the recent efforts of the Colorado Alliance of Research Libraries as a useful prototype for cooperation.

So, what, in the final analysis, will be the model for scholarly communication in the future? The authors word the answer to this question with such great care that it is worth citing verbatim: "It is extremely unlikely—we would say almost inconceivable—that any alternative model will completely supplant the existing one at any point in the foreseeable future. Rather, we envision a situation where incremental modifications to the current model will be made. We would also argue, however, that it is equally inconceivable that there will not eventually be a more-or-less complete transformation of scholarly communication." We were right all along.

This excellent study is accompanied by more than the usual scholarly apparatus, with foreword, introduction, bibliography, three appendixes, a glossary, and even a fifteen-page synopsis, contributed by Ann Okerson, director of the ARL Office of Scientific and Academic Publishing. Unfortunately, it has no index. It is quite evident that the Mellon Foundation has a genuine desire to help the scholarly communication system grow stronger, healthier, more effective. It has distributed many copies of its study to university presidents, academic vice presidents, and library directors free of charge and is making other copies available for wide distribution at nominal cost. The foundation sees that the future of scholarly communication is not a library issue, but an institutional issue; that it is not just an institutional issue, but a national issue. The Mellon Foundation has done much to advance scholarly communication and the cause of academic libraries by producing and disseminating this study.—*Charles B. Osburn, University of Alabama, Tuscaloosa.*

Glazier, Loss Pequeño. *Small Press: An Annotated Guide.* Westport, Conn.: Greenwood, 1992. 123p. $49.95 (ISBN 0-313-28310-9). LC 92-15482.

Bibliographies are not usually recommended as entertainment. But then can there be any more charming annotator than Loss Glazier? As incisive and informative as one might wish, he never resists an opportunity to gloss, adding a bit of background or a reference, a passing opinion or an illuminating quote. The result is that this shortish list (174 items) may well be the elegy of the Mimeo Revolution, that Indian summer of literary Modernism. Glazier likes his subject too well ever to be dry, and has shown cleverness at a postmodern way of writing history. Self-confident, limited, not totalizing, not transcendental, thoroughly entertaining.

This is not a comprehensive book. It is restricted to the period since 1960, and to American materials only. It concerns itself not with single authors or presses, nor regional publishing, nor reviews, how-to-books, vanity or subsidy publishing, or fine presses. It is strictly literary—a significant limitation—and includes current information, coresources, and supplementary materials (catalogs, lists, bibliographies). The standard histories and other sources covering the period up to 1960 are concisely dealt with in the preface. While I can't think of anything missing, Glazier's purpose is not to be the last word, and he has not dug out obscure material (except for one master's thesis, and some letters to editors). Though not exhaustive, this is a well-done list. Its glory is all in the annotations.

Glazier begins with an introduction mostly devoted to characterizing the small press, where we learn that the "mimeo revolution" was actually made more on offset presses. I suspect Glazier would like to believe that the "spirit of mimeography, that of the small publisher, has produced an important legacy; it enters the nineties not only with a proven record of the production of literary texts but with an increasingly visible presence in the publishing industry." Yet, as with the term *hacker*, there has been an important shift in thirty years that begins to come out as Glazier tries to return the term *small press* to its original meaning. Little magazines (increasingly a misnomer) have received most of the attention while the volume of publishing has shifted largely to books. "Academic quarterly," "alternative" and "underground press," or "independent publisher" are all too astigmatic or wide-angle to serve as descriptive terms, including as they do, the nonliterary, the too-commercial, and the insufficiently independent. The problem is that there has been a culture shift, and what Glazier chooses finally to call *small press*, numbering about 700 at the beginning of his period, has been overwhelmed by small, independent publishers of New Age books, cookbooks, and self-help books. While the small press has tripled in size, these other publishers have gone from nothing to some 12,000 in the same period. The noncorporate, locally based, small scale press of limited readership and uncommodified cultural ideals (described here as the epitome of the species) has become a minority force even on its home ground. Nowhere is this revealed more clearly than in the sequence of COSMEP catalog listings (items 167–170), from the first (a "who's who" and a "vital record" of the mimeo revolution at a crucial moment) to the last (a "disappointment" and captive of the "commercially expedient"). In between, we have the lavishly designed and illustrated Whole COSMEP Catalog in reverse alphabetic order and the microfiche third version, innocent of editing. The fourth is thoroughly professional, typeset, paginated, edited, and vetted—and soulless. Well, this is the history of the boomers themselves, who made this movement and now have come to middle age and power. I hope that Glazier's optimism is justified. One thing is clear: small presses (and literature, and we, too) are not what they were, whatever they are to become.

Meanwhile, I've spent hours browsing through the entries, and all that familiar, funny, laughable, confused, wonderful time again. Don't put this book on the reference shelves. Let people check it out and take it home with them.—*Charles W. Brownson, Arizona State University, Tempe, Arizona.*

Euro-Librarianship: Shared Resources, Shared Responsibilities. Ed. by Assunta Pisani. Binghamton, N.Y.: Haworth, 1992. 605p. $49.95 (ISBN 1-56024-266-3).

This volume documents the proceedings of a conference held in April 1988 in Florence under the auspices of ACRL's Western European Specialists Section (WESS). Weighing in at a hefty 605 pages, it comprises some fifty individual contributions offering in their totality an impressively diverse collection of topics, approaches, languages, and potential readerships. According to the brief introduction by Assunta Pisani, the purpose of the conference (and presumably of the volume) was to foster an exchange of information between Western European specialists in North American libraries and their Old World counterparts, centered on the relatively conventional theme of efforts to "collect, organize, and preserve materials that support research" and a potentially more controversial "examination of both the needs for research on Western Europe and of the programs underway to support these needs."

So far, so good. Few library collection managers with responsibilities that include Western Europe would dispute the need for a cogent and detailed examination of these topics. And yet, many potential readers of this volume will be both attracted by the topics and repelled by their presentation in the uneven, redundant, and diffuse format of this lightly edited collection.

The compilation's problems are at least threefold. First, the spread and distribution of topics defy clear description. The papers are distributed among fifteen rubrics, but the intended meaning of these rubrics is muddied by their application. At least one paper, Herbert Lottman's smooth "A Library User's View," stands outside these categories altogether; another category ("Access: Cooperative

Microfilming") holds but one five-page article on preservation options, which is thus segregated from a related category ("Access: Microforms") with papers yielding information about specific microform projects. Some sections use general themes ("Scholars' Sources in Western Europe" and "Research Centers and Special Collections") to gather short descriptions of specific repositories, while others, particularly the two dealing with fringe movements, provide more substantive essays attacking circumscribed problems from various angles. The poor interrelating of the parts represented by the rubrics has the effect of dragging the contributions along a very bumpy surface indeed.

A second problem is closely related to the inadequate organization of the volume: the quality, focus, format, and intended readership of the individual contributions are inconsistent. The stylistic range varies from chatty, fast-paced, and even anecdotal to dry and descriptive. Adding to the stylistic diversity, seven papers are in French or Italian, despite English titles in some cases. Most of the first hundred or so pages consist of sparse summaries of library services, with more than a few qualifying barely as abstracts. The middle of the volume contains more substantive and imaginative treatments of topics such as regional publishing, fringe movements, the émigré question, issues of marginality, and personal narratives. These contributions deserve better treatment in a more selective and intensively edited volume, and the relatively tight focus of these five sections may suggest a future project along these lines. The last third of *Euro-Librarianship* is a potpourri of largely descriptive papers with a generally traditional focus on library matters, such as access to a variety of formats and the pricing of library materials.

A third issue, quite separate from the quality of the proceedings, is whether it is necessary to republish them after prior publication as volume 15 (1992) of the journal *Collection Management*. The sole difference between the two versions of these proceedings is the addition of an index for the book volume. In this light, it is worth noting again that the WESS conference took place more than five years ago, so that one might have expected more substantial revisions. At least, it would have been reasonable to excise the eight-page conference schedule, including meals, receptions, and sponsors for coffee breaks, and improve the abstracts provided for some of the papers. Moreover, some of the contributions have already appeared in other journals likely to be held in many libraries. A modicum of editorial rigor would have greatly increased the appeal and readership for these proceedings. And yet, despite these faults, RLIN and OCLC records suggest that many academic libraries find themselves in possession of both printings of the conference proceedings at a total cost of nearly $200. Considering the role of librarians in the production of this volume, this expenditure of library resources for the duplication and reduplication of conference papers of uneven quality is ironic.

In all, *Euro-Librarianship* will be a great disappointment for Western European specialists. Despite an impressive list of contributors, admirable goals, and some undeniably good papers, this volume fails to provide either a set of foundation texts or a platform for coherent discussion of issues in European librarianship. There are choice morsels to be found, but the stew is toilsome to digest.—*Henry Lowood, Stanford University, Stanford, California.*

Hannesdóttir, Sigrún Klara. *The Scandia Plan: A Cooperative Acquisition Scheme for Improving Access to Research Publications in Four Nordic Countries.* Metuchen, N.J.: Scarecrow, 1992. 340p. alk. paper, $42.50 (ISBN 0-8108-2540-6). LC 92-1070.

A group of large research libraries in Denmark, Finland, Norway, and Sweden established the Scandia Plan in 1956 to divide the responsibility of acquiring little-used non-Nordic (plus Icelandic) materials thought to be important to Nordic scholars. Participation in the plan was voluntary, and each library had to bear its own costs. The plan was intended to bring savings when materials were no longer collected for certain selected subject areas, and the funds were to be reallocated to the subjects for which the library assumed responsibility. Along one track, national and university libraries worked together, each selecting subject areas in which it was responsible for extensive collection development. Special libraries formed a second group. They agreed on the division of acquisitions based on the place of publication or language, and focused on four types of material: agricultural and veterinary science, technical, medical, and government documents. The plan was dissolved in 1980.

According to the author, the Scandia Plan failed for several reasons: a lack of strong administration, deficient locating tools, an emphasis on peripheral materials, and the inability to extend into other subject areas. These limitations undermined the high expectations of the plan and ran counter to the trend in information provision that emphasized access to the most needed sources. Ultimately, the Scandia Plan became a political issue. The advantages to the individual holding library were thought to be excessive, providing little benefit to the other libraries. Three other cooperative acquisition projects—the Farmington Plan in the United States, a German plan sponsored by the Library Committee of the Emergency Society for German Scholarship (later the German Research Society), and the Swedish Plan for Cooperative Acquisitions—served as models for the Scandia Plan. Yet, as Hannesdöttir suggests, none addressed or solved the Scandia Plan's dilemmas. It is instructive that the German plan still flourishes, due in significant part to the infusion of funds by the German Research Society. By contrast, the Scandia Plan never received outside monies. Cooperative collection development projects succeed only when each participating library perceives the benefits to outweigh the costs. The benefits and costs may be transparent or hidden, real or imagined, but if the participating libraries lose, then group failure cannot be far away.

The particulars of the Scandia Plan have largely faded from memory in recent years. Hannesdóttir's fine history (an essentially unchanged version of her 1987 doctoral dissertation from the University of Chicago) provides the first thorough discussion of the Plan's intricacies. After the initial euphoria of cooperative plans wears off, the issues remain political and economic at the core. This is the major lesson of the failure of the Scandia Plan, and its ramifications are important and unequivocal.—*Michael P. Olson, University of California, Los Angeles.*

Dearstyne, Bruce W. *The Archival Enterprise: Modern Archival Principles, Practices, and Management Techniques.* Chicago: American Library Assn., 1993. 295p. alk. paper (ISBN 0-8389- 0602-8)

In providing both novice and initiate

with a conceptual overview of the history and profession of archives, Bruce W. Dearstyne presents a thoughtful and well-organized discussion of archival theory, practice, procedures, and problems. Dearstyne, an archivist and teacher, summarizes neatly the prevailing state of affairs.

The "enterprise" of the title is really the primary mission of an archivist who, in Dearstyne's view, perpetuates the social memory, transmits cultural heritage, and helps people to learn from the experiences of the past. Dearstyne uses the term historical records to encompass manuscript materials, personal papers, and archival collections. He includes an assortment of examples from these different branches of archival work, and case studies from four hypothetical institutions—a research library, special collections department, public library, and municipal archive—are presented and referred to throughout the book.

Following a helpful explanation of terms often used all too loosely, even by archivists, Dearstyne describes what archivists do and why they do it. He reviews archival theory with its attendant conflicts and limitations, explains the importance of keeping historical records, and distinguishes the work and concerns of archivists from those of librarians and records managers.

Moving from theory to practice, Dearstyne analyzes the archival "enterprise" through a series of chapters describing everything from hands-on work with records to public access: programs and planning, financial needs, the professional nature of the work, administration, identification and selection of records, arrangement and description, preservation, researcher services, marketing and outreach, and electronic records. The text of *The Archival Enterprise* is enhanced by useful examples of typical donor agreements, mission statements, work plans, job descriptions, MARC-AMC cataloging records, finding aids, and guide entries. The mission statements and work plans should prove particularly valuable to archivists new to the field, those working alone, or, indeed, anyone who must produce long-range planning documents or justify continued or increased funding, or even the very existence of a historical records program.

In general, Dearstyne's advice on the importance of planning, program administration, management, and marketing is practical and insightful. His arguments develop logically, and the articulation of six ways to promote an archival program and repository, in particular, should be required reading for any professional in the field. The more technical chapters on problems of appraisal, description, cataloging, and preservation are, of necessity, sketchy. They summarize current archival practice and give a concise view of questions and problems. Reading these chapters will provide archivists with perspective on their own repositories. These chapters are intended not to supersede but rather to complement the series of technical manuals published by the Society of American Archivists, and *The Archival Experience* would be a useful stepping-stone to those more detailed works.

The weakest chapter of the book concerns the professional nature of archival work and education. Although Dearstyne argues strongly for increased professionalism through education and inserts a considerable amount of recent archival history and politics into this chapter, the result is vague and suggests ambivalence. This may, however, be appropriate when archivists are themselves so divided over issues of certification and definition of their professional role. Any attempt at a summary or conclusion to the volume is noticeably absent, though some problems of the future are mentioned in Dearstyne's final chapter on electronic records.

Despite its problems, this volume is a useful tool not only for archivists but for students and library administrators as well. It is a handy introduction to the field of historical record-keeping and would make an ideal textbook around which a course in the administration of historical records could be structured.—*Jack Eckert, College of Physicians of Philadelphia, Pennsylvania.*

Libraries for the Future: Planning Buildings That Work: Proceedings of the Library Buildings Preconference, June 27 and 28, 1991. Ed. by Ron G. Martin. Chicago: American Library Assn., 1992. 98p. $25 (ISBN 0-8369-0597-8). LC 92-2252.

The purpose of the Library Administration Management Association's Buildings and Equipment Section (BES) 1991 preconference on planning library buildings was to provide "solid, practical guidance in designing libraries that will meet the future demands for library facilities and services throughout the country." The intended audience was both public and academic librarians. The published proceedings from this conference include papers on both broad planning issues and specific tasks associated with planning library buildings. These cover the role of building consultants and planning teams; writing program statements; using space inventories, projections, and standards; technical requirements and building criteria; functional requirements and space relationships; selecting an architect; and architectural symbols and specifications. A three-page selected bibliography on library building planning is also included.

Among the contributors are academic and public librarians, consultants, and facilities planners. With the exception of the first paper, which is jointly authored and compares and contrasts academic and public library building issues and trends, most papers in the compilation focus either on public or on academic libraries exclusively. Because there is overlap for almost every topic covered, the same information is sometimes repeated in more than one chapter. This fact, coupled with the informal writing style appropriate to papers delivered at a preconference, make it more difficult to find a concise description of a specific topic than might be the case with a "classic text" on the subject (such as *Planning Academic and Research Library Buildings* by Keyes Metcalf, David C. Weber, and Philip Leighton). While having more than one person provide similar or identical information on a given topic is useful in a conference setting, the same repetition is annoying and distracting when printed in a book.

Despite this shortcoming, the proceedings do provide useful descriptions of the processes involved in planning a library building, illustrated with examples from the authors' personal experiences. The description of the process used to plan a public library building in Superior, Wisconsin (found in Bob Carmack's chapter "Outline of the Building Planning Process"), is a fascinating look at a design methodology that insured inclusiveness and creativity.

This book does not provide specific answers to what "libraries for the future" will require in terms of building design. Nowhere is there a discussion of the specifics of cabling, telecommunications, or other technical subjects, nor are there visionary musings on the "virtual library." What is provided are the questions that should be asked throughout the planning process to insure the right technical and design solutions. The first author, Joel Clemmer, makes the following statement: "A building project should begin with reexamination of the mission, goals, collection philosophy, needed staffing and service changes, and overall management of the academic library." This seemingly simple statement articulates a fundamental truth which, if heeded, will result in "libraries for the future" that are more than just variations on the same theme. For those readers who take the time to rethink the assumptions on which their present model of library service is built, the reward will be a building that can adapt to the enormous changes ahead.—*Jean Walstrom Haley, University of St. Thomas, St. Paul, Minnesota.*

SHORT NOTICES

Preservation of Electronic Formats & Electronic Formats for Preservation. Ed. by Janice Mohlhenrich. Fort Atkinson, Wisc.: Highsmith Pr., 1993. 144p. $25 (ISBN 0-917846-17-6).

This very useful book contains six papers from a 1992 conference sponsored by the Wisconsin Preservation Program. In view of the enormous amounts of money (and hope) currently being invested by libraries in electronic data and text-digitizing projects, it behooves librarians to have a clear idea of the preservation issues involved in electronic formats. The double title of the book neatly summarizes the paradoxical situation: electronic data present large (and largely uncharted) preservation problems while, on the other hand digitizing processes hold the promise of helping libraries cope with our vast brittle-books problem. The papers in this volume are a mix of case studies (Cornell, Marquette, and the National Archives) and state-of-our-knowledge presentations on the durability and longevity of specific electronic formats, the best current preservation methods, costs of imaging techniques and the appropriateness of these formats for specific library applications.

Bettmann, Otto L. Bettmann: *The Picture Man*. Gainesville, Fla.: Univ. Pr. of Florida, 1992. 178p. (ISBN 0-8130-1153-1)

In this wry and charming autobiography, Otto Bettmann, who turns ninety in October, traces a career that began in the Prussian State Art Library in Berlin and, after a life running the Bettmann Archive (a three million item image-provision company), has come full circle at the Florida Atlantic University Library in Boca Raton, where he works as curator of rare books. When Bettmann, a Jew, was fired from his library job in 1933, he applied his training in cataloging and classification to his own collection of pictures, providing them with a powerful and sophisticated indexing system and transforming a hobby into a highly successful business. Endlessly enterprising, Bettmann arrived in the United States just as "pictorialism" was coming into its own in publishing and, especially, in advertising. In 1980 the Bettmann Archive was sold to Kraus-Thomson. Surprisingly, Bettmann tends to dismiss the communicative and informational value of images relative to language, but he implicitly concurs with the wisecrack, "A good picture is worth a thousand bucks." The book is generously illustrated.

After the Electronic Revolution, Will You Be the First to Go? Ed. by Arnold Hirshon. Chicago: American Library Assn., 1993. 62p. $18 paper, ALA member price $16.20 (ISBN 0-8389-7650-6).

The four papers that made up the proceedings of the 1992 ALCTS President's Program demonstrate, if nothing else, the value of knowing one's audience. The keynote speech by hypertext developer and visionary Theodore Nelson demonstrates ignorance about libraries and patronizes librarians. Nor does the final talk, by biologist Thomas Duncan on scholars' need for and development of the information technology infrastructure, advance any reasonably informed librarian's understanding of the issues. Peter Graham, on the other hand, presents a most informative discussion of the problems relating to the physical and especially intellectual preservation of electronic information, and of the role of librarians in finding good solutions. In addition, Susan K. Martin offers a provocative and concrete agenda for the library profession if it is to have a voice in an environment increasingly dominated by electronic media.