FINAL REPORT

CIC ADVISORY COMMITTEE ON UNIVERSITY PRESSES

November 11, 2002



TABLE OF CONTENTS

| Committee Members | | |
|---|---|----|
| Executive Summary | | |
| | | |
| Charge | | |
| History | | |
| Goal 1: Data Collection and Analysis | | |
| Goal 2: Specific Recommendations for Additional, Worthwhile Collaboration | | |
| Goal 3: Larger Issues and Questions | | |
| Conclusion | | 13 |
| References and Further Reading | | |
| | | |
| Appendix A: | Resolution Adopted by the Big Ten Council of Presidents and Chancellors, December 3, 2001 | 15 |
| Appendix B: | Interim Report, CIC Advisory Committee on University Presses, May 22, 2002 | 16 |
| Appendix C: | Report on CIC University Presses, November 14, 2001 | 19 |
| Appendix D: | Draft <i>MLA Report on the Future of Scholarly Publishing</i> from the Ad Hoc Committee on the Future of Scholarly Publishing of the Modern Language Association, December 2002 | 47 |
| Appendix E: | CIC E-Publishing Venture Statement of Principles and Progress, September 2002 | 61 |
| Appendix F: | AAUP Statement on the Value of University Presses | 64 |

COMMITTEE MEMBERS

| Chicago: | Don Collins (Press CFO) |
|-----------------|---|
| Illinois: | Paula Kaufman (Library Director) |
| Indiana: | Peter-John Leone (Press Director) |
| Iowa: | Holly Carver (Press Director) |
| Michigan: | Phil Pochoda (Press Director) |
| Michigan State: | Robert Patterson (Controller's Office) |
| Minnesota: | Doug Armato (Press Director) |
| Northwestern: | David Bishop (Library Director) |
| Ohio State: | Malcolm Litchfield (Press Director) |
| Penn State: | Eva Pell (VP for Research) |
| Purdue: | Jim Bottum (VP for Information Technology) |
| UW-Madison: | Annie Stunden (CIO) |
| CIC HQ: | Tom Peters (Director, CIC Center for Library Initiatives) |

EXECUTIVE SUMMARY

The genesis of the CIC Advisory Committee on University Presses was a resolution adopted by the Big Ten Council of Presidents and Chancellors on December 3, 2001 (see Appendix A). The Presidents, Chancellors, and Provosts appointed one representative from each of the 12 member universities to analyze traditional press functions that might be consolidated in a flexible, voluntary, coordinated, consortial approach. The Committee worked diligently to complete its charge by May 2002. When it became apparent that a six-month extension would be needed, the Committee issued an interim report (see Appendix B).

An important precursor to the work of the Committee was the November 2001 *Report on CIC University Presses* (see Appendix C). Another timely and intelligent report from the Ad Hoc Committee on the Future of Scholarly Publishing of the Modern Language Association informed the work of the Committee (see Appendix D).

The Committee's activities and recommendations for the three goals specified in its charge are outlined below:

Goal 1: Gather data about the costs, assets, and income sources of current CIC press operations.

- After three attempts to pursue this facet of its charge, the Committee concluded that, because each CIC press is organized differently, these attempts to compare existing operations are misleading. Although a long-term, resource-intensive, complex study of CIC press operations may yield valid, worthwhile analyses, the Committee recommends that no additional time be devoted to snapshot comparisons.
- Goal 2: Identify and evaluate opportunities for additional collaborative activities involving the CIC presses.
 - Backlist Website: The Committee recommends that a collaborative website to sell backlist titles be constructed by interested CIC member university presses, in order to decrease inventory, accelerate revenues, and bring many valuable scholarly titles back to the attention of the scholarly community.
 - Short-Run Digital Printing: The Committee recommends that the Chicago Digital Distribution Center make a formal proposal to CIC presses that are not CDDC members for short-run digital printing (SRDP).
 - Collaborative Production Services: The Committee recommends that the CIC negotiate with one or more printers for a consortial rate or rebate; develop a consortial request for proposal; collaborate when appropriate on a limited set of raw materials (e.g., paper); and create a collaborative agreement for shipping.

• Summit: The Committee recommends that the CIC organize a summit conference involving Provosts, faculty authors, untenured faculty, tenured faculty, press staff, series editors, journal editors, librarians, and others to discuss the key issues outlined in section three of this report and to recommend strategic directions for university presses.

Goal 3: Develop a strategic vision of where the CIC presses should be in ten years.

The Committee concluded that, rather than create a fully articulated vision of where university presses should be in ten years (built on speculation about a variety of unpredictable key variables and developments), a more useful exercise for research universities, the university press community, various stakeholder groups, and scholarly publishing in general would be to articulate the overriding issues, questions, and opportunities that will inform the process of positioning the university presses at CIC member universities for continued success. The Committee conducted an environmental scan that identified several key interrelated issues.

- Promotion and tenure
- Operating costs and revenue streams
- The role of university presses in the broader university community
- Distribution and sharing of publication costs
- Intellectual property rights and ownership
- The effects of the digital revolution on scholarly publishing

These issues need to be addressed collectively before the future of scholarly publishing and the roles of university presses in the scholarly communication process can be clarified.

CHARGE

The charge to the Committee was to analyze traditional press functions and identify flexible, consortial approaches to consolidated efforts. Specific goals included:

- 1. Building upon the Report on CIC University Presses (see Appendix C) compiled by Ken Gros Louis, Doug Armato, and Bill Regier and submitted in November 2001 to the CIC Presidents and Provosts, gather more data and information about the costs (preferably broken down along functional lines), assets, and income sources of current CIC press operations.
- 2. Identify and evaluate opportunities for additional collaborative activities involving the CIC presses.
- 3. Develop a strategic vision of where the CIC presses should be in ten years.

HISTORY

The genesis of the CIC Advisory Committee on University Presses was a resolution adopted by the Big Ten Council of Presidents and Chancellors, December 3, 2001 (see Appendix A). The Presidents, Chancellors, and Provosts appointed the Committee members. In January 2002 an email discussion list was established for the group. The entire Committee met three times: April 8, July 29, and Sept. 30. In addition, several sub-committees held meetings, and the entire committee had several conference calls.

GOAL 1: GATHER DATA ABOUT THE COSTS, ASSETS, AND INCOME SOURCES OF CURRENT CIC PRESS OPERATIONS

<u>Recommendation</u>: After three attempts to pursue this facet of its charge, the Committee concluded that, because each CIC press is organized differently, these attempts to compare existing operations are misleading. Although a long-term, resource-intensive, complex study of CIC press operations may yield valid, worthwhile analyses, the Committee recommends that no additional time be devoted to snapshot comparisons.

The first goal of the Committee was to gather additional data about the current costs, assets, and income sources of the university presses at CIC member universities. The anticipated outcome was a meaningful, accurate statistical snapshot of the financial situations of the 12 university presses. The Committee made three attempts to pursue this facet of its charge:

- 1. An independent industry consultant was hired to gather and analyze data.
- 2. The most recent sets of the annual AAUP survey were collected from the 12 presses.
- 3. An attempt was made by a subcommittee to compare data from each press regarding gross margin, inventory, salaries and benefits, and other operating expenses.

After three attempts to pursue this facet of its charge, the Committee concluded that, because each CIC press is organized differently, these attempts to compare existing operations are misleading. The Committee concluded that while financial information is readily available from each CIC press, each press' finances are organized differently. Snapshot comparisons of such different systems rapidly become misleading. As the Committee's interim report (May 2002) noted, "This lack of uniformity makes it impossible to use currently available numbers to develop financially grounded arguments for collaboration." This situation is not unique to university presses. Libraries and university IT operations, for example, experience the same "apples and oranges" challenges.

GOAL 2: IDENTIFY AND EVALUATE OPPORTUNITIES FOR ADDITIONAL COLLABORATIVE ACTIVITIES INVOLVING THE CIC PRESSES

The second charge to the Committee entailed identifying and evaluating opportunities for additional collaborative activities involving the CIC presses. The November 2001 *Report on CIC University Presses* (see Appendix C) articulates several areas in which CIC university presses already collaborate. Building upon that foundation, the Committee discussed numerous potentially worthwhile collaborative efforts. Several were rejected. For example, the Committee sees little value in trying to improve upon the existing excellent AAUP (Association of American University Presses) collaborative marketing and advertising program and encourages the CIC member university presses to take further advantage of the existing AAUP advertising rates. The Committee recognizes that, for each recommendation, each press will decide whether or not participation is in the best interest of that press.

1. Backlist Website

<u>Recommendation</u>: The Committee recommends that a collaborative website to sell backlist titles be constructed by interested CIC member university presses, in order to decrease inventory, accelerate revenues, and bring many valuable scholarly titles back to the attention of the scholarly community. The Committee asked the University of Chicago Press to develop cost estimates for starting and operating a collaborative website to sell backlist titles.

The Committee discussed the idea of creating a shared CIC website where backlist titles with slow-moving inventory could be sold at a discount. The goal is to reduce the amount of inventory each press is carrying and increase revenue. This website could dovetail eventually with the CDDC and the CIC E-Publishing Venture websites.

2. Short-Run Digital Printing (SRDP)

<u>Recommendation</u>: The Committee encourages the CDDC (Chicago Digital Distribution Center) to make a formal proposal to the non-CDC (Chicago Distribution Center) CIC presses for short-run digital printing and BiblioVault services.

In recent years, new opportunities to digitally reprint books in very low quantities from electronic files, termed short-run digital printing (SRDP) or print-on-demand (POD), allow presses to gain greater control over one of their largest problems: excess inventory. Although the unit costs of books printed digitally are higher than the unit costs of books printed conventionally, the reduction in excess inventory costs makes the SRDP option very appealing and economical. SRDP will eventually permit presses to keep almost all books in print, thereby maintaining good relationships with academic authors who are often primarily concerned that their books be permanently available.

The Committee considered ways in which CIC members might collaborate on SRDP activities, including even the possibility of collectively purchasing digital technology and equipment both to convert print books into digital files and to print them electronically. Most of the Committee members thought, however, that because the University of Chicago Distribution Center (CDC) has already made significant strides and very significant investments in all of these areas, working with the CDC on these matters would be both prudent and promising.

The CDC has established an adjunct group, the CDDC (Chicago Digital Distribution Center), to create both a SRDP facility and a digital repository coupled with a sophisticated fulfillment and distribution center (the BiblioVault). Currently use of these facilities is restricted to the 22 member presses of CDC (including 7 CIC member presses), but the CDC intends to extend membership in the BiblioVault to other interested presses, as well. The CDC arranged for Edwards Brothers – one of the leading printers for university presses – to install and operate a digital printing operation within the CDC warehouse. This permits the CDC presses to digitally replenish slow moving inventory automatically on site, eliminating even the need to transport finished books from printer to warehouse.

Digital files for the SRDP are stored in the BiblioVault, but perhaps the more exciting and visionary potential for the digital archive lies in the electronic sale and distribution of the aggregated content. A primary goal of this collaboration would be to provide libraries, academic institutions and scholars, nationally and internationally, with online access to a substantial body of scholarly materials at a reasonable cost. CDC obtained a \$1.5 million grant from the Mellon Foundation to help fund the digitization (in a searchable format) of some 2300 backlist volumes (that lack any electronic file) and 2850 more recent volumes (that were printed from PDF files); to archive those files; to develop a rights database for those files; and to manage and organize the BiblioVault in a variety of ways.

From a CIC perspective many important questions remain regarding participation in the CDDC. Notwithstanding these, however, the Committee thinks that the CDDC is already so advanced (particularly with regard to SRDP) and has launched this complex agenda with such impressive planning, financial investment and early success that we should work constructively with the CDDC to develop these very promising programs further and in a more collaborative fashion. The participatory benefits to the CIC members of CDDC are already apparent. We hope to enlarge these digital opportunities for all CIC members, whether or not they utilize the CDC for book distribution.

3. Collaborative Production Services

<u>Recommendation</u>: Negotiate with one or more printers for a CIC consortial rate, which would be available up front on a job-by-job basis. Conversely, we could negotiate a consortial rebate program. At the end of each year, the participating printer(s) would provide a rebate, based upon the volume of work done for all the participating CIC presses.

<u>Recommendation</u>: Have interested presses work on a consortial request for proposal and a collaborative list of preferred printers. This type of collaborative effort could help standardize the bid process. For the RFP it may be possible to modify the standard RFP currently used by the CIC Purchasing Consortium. For the list of preferred printers, all CIC member presses already maintain such lists.

<u>Recommendation</u>: For certain common types of publications, it may be possible to collaborate on a common stock of paper or common minor design features (e.g., a small set of options for endsheets in a hardbound book).

<u>Recommendation</u>: Create a collaborative agreement for shipping. Gang shipping would reduce shipping costs for large shipments to a common destination (e.g., the Chicago Distribution Center), but it would increase the shipping time for some of the new titles included in each shipment.

All 12 CIC university presses outsource the printing and binding of their books. Because five commercial printers receive the majority of CIC printing jobs, the Committee explored opportunities for additional cost-savings through collaboration. Dean Friermood, principal negotiator for the CIC Purchasing Consortium, was consulted. The Committee recognizes that state purchasing regulations need to be followed or adapted to give all CIC presses the opportunity to participate in this collaborative program. These recommendations for cost-saving measures are based on initial conversations between Committee members, Dean Friermood, and contacts at commercial printers.

4. Summit

<u>Recommendation</u>: The Committee recommends that the CIC organize a summit conference involving Provosts, faculty authors, untenured faculty, tenured faculty, press staff, series editors, journal editors, librarians, and others to discuss the key issues outlined in section three of this report and to recommend a shared vision and strategic directions for university presses. With its balance of press directors and personnel from other units across the university, the Committee had many good discussions about the history, current situation, and future potential of university press publishing. It became apparent to the Committee that these discussions should be continued and broadened to include more stakeholders.

The Committee believes, however, that the probable financial effects of all these recommendations will be minimal. Many CIC presses are already leveraging consortial opportunities. Pursuing this series of collaborative projects will not generate significant progress toward solving the larger challenges in creating a sustainable scholarly publishing system. The Committee notes that CIC Press Directors are willing to collaborate, but they want the collaboration to make sense. The Committee is keenly interested in the fundamental issues and questions outlined below.

GOAL 3: DEVELOP A STRATEGIC VISION OF WHERE THE CIC PRESSES SHOULD BE IN TEN YEARS

Regarding its third goal, the Committee concluded that, rather than create a fully articulated vision, it could better serve research universities, university presses, other stakeholders, and scholarly publishing by articulating the overriding issues, questions, and opportunities that will inform the process of positioning university presses at CIC member universities for continued success. In addition to smaller collaborative efforts that could lead to incremental decreases in costs or increases in revenue, numerous larger issues, questions, and opportunities must be addressed.

Issue 1: Promotion and Tenure

Throughout its work the Committee has noted that the challenges facing university presses are inextricably linked to the promotion and tenure process. As the recent report from the Modern Language Association notes (see Appendix D), in many disciplines a faculty member needs to have one or more books published in order to have a viable tenure application.

The entire university system creates a mandate to publish. The resulting inundation of manuscripts contributes to the pressures placed on university presses. An incentive package has been institutionalized that puts university presses in a double bind: they are expected to remain economically viable, yet they are expected to publish as many high-quality manuscripts as possible to support the tenure process. In addition, the expectation that university presses break even financially exerts pressure to publish other, nonscholarly material. If the tenure system continues unchanged, the incentive system for the presses needs to change. The set of conflicting incentives is a source of concern for all parties. The Committee recognizes that universities cannot solve this problem unilaterally. Collaborative efforts are required.

Issue 2: Operating Costs and Revenue Streams

Most university presses are losing money or require subsidies from their parent institutions. In some cases these losses are not new. Many presses are asked to generate additional revenue in order to recoup previous losses. Each university needs to articulate a mandate to its press. A CIC blanket mandate would be unable to recognize the individual university environments and cultures within which the presses operate. "The capital requirements and financial ebbs and flows of the publishing business may seem unruly and unpredictable within the context of the more stable and settled financial structure of a university budget; mutual understanding and good communications are essential" (Givler 2001, 107). Institutions should work with their presses to set expectations about the types of publications that are needed from the press, and the revenue and institutional subsidy expectations. Each university's mandate to its press needs to be clear but realistic and negotiable. A general mandate to all CIC university presses would not be worthwhile.

The revenue-generating potential of scholarly e-books remains unknown. Although the ideal of making most scholarly output openly accessible in electronic formats is attractive, if such an ideal were applied to university press publications it would diminish their long-term revenue generating potential. In the long run, e-publishing could reduce costs, but in the short term, e-publishing ventures merely add to the cost burdens borne by university presses. Currently the user demand for e-books is small and slowly developing. For the near future, print publications will continue to generate most of the revenue for university presses. It is unknown how long print revenues can subsidize e-publishing operations. Commercial aggregators of academic e-books (e.g., netLibrary, Questia, and ebrary) are struggling. Nevertheless, licensing electronic content to aggregators may become a significant revenue stream for university presses. Early royalty checks to presses from Project Muse, netLibrary, and other aggregators are encouraging. The National Academy Press reports that providing free online e-versions of their publications has not diminished the print sales of those publications. However, the Committee emphasizes that developing and maintaining high-quality print and electronic publishing operations create major stresses on the finances of university presses.

Issue 3: The Role of University Presses in the Broader University Community

The Committee is keenly interested in the role of university presses in the broader university community. University presses have opportunities to strengthen their key partnerships with a variety of campus units, including graduate colleges, libraries, and information technology units. University presses share one distinguishing characteristic: unlike most other campus units, they must meet the needs of a set of customers the majority of whom are not, have not been, and will not be affiliated with the university as students, faculty, staff, or alumni. The digital environment could create real synergies between libraries and university presses. See, for example, the September 2002 statement from the CIC E-Publishing Venture Task Force (Appendix E). Institutional digital repositories, such as the proposed Knowledge Bank at Ohio State University and DSpace at MIT, could get the presses more involved in the activities of the university.

In general, the Committee thinks that the campus profile of each university press needs to be raised. Press Directors and staff should be consulted on campus matters relating to publishing, e-publishing, and scholarly communication. The press should be highlighted on the university

homepage. The press is an excellent form of outreach for the university, like the extension service, not-for-credit education, and university radio and television stations. Because, as the AAUP statement on the value of university presses asserts

(<u>http://www.aaupnet.org/news/value.html</u>), "university presses extend the reach and influence of their parent institutions, making evident their commitment to knowledge and ideas," universities should be interested in the publishing programs of their university presses.

Issue 4: Distribution and Sharing of Publication Costs

Approximately ninety-two presses affiliated with universities provide publication services for a high percentage of academics working at thousands of colleges and universities. The Committee recommends that ways be explored to have authors affiliated with universities and colleges without university presses pay part of the cost of having their books published. Perhaps a subvention system to support all university press book publishing, regardless of the extent (none, small, medium, or large) of the publishing program of the institution with which the principal author currently is affiliated, would be the most acceptable and effective. Historically, many colleges and universities receive the benefits of the university press system without bearing in any appreciable way the costs of scholarly publishing. This is a larger issue for the smaller university presses. At the Ohio State University Press, for example, approximately 63 percent of their authors are affiliated with institutions without university presses. The CIC should consider asking the AAU or NASULGC to take a stance on this issue. As the *MLA Report on the Future of Scholarly Publishing* notes (see Appendix D), a predictable subvention could work:

"We urge administrations to establish subvention funds to help with publication costs (including permissions fees), with special emphasis on subsidies for faculty members attempting to place their first book."

Issue 5: Intellectual Property Rights and Ownership

In the early years of the new century, the issues surrounding intellectual property rights-particularly copyright--appear to be building to a decisive moment both nationally and internationally. The age of networked information, in which all types of digital information objects--from the latest research findings concerning nanotechnology to a pirated pop song--can be perfectly copied and mass distributed at the speed of light, has created new pressures to review and possibly revamp the social, cultural, legal, and technological foundations of knowledge creation, transfer, and use. Phenomena as diverse as European Union directives, the forthcoming opinion of the U. S. Supreme Court in the case of Eldred v. Ashcroft, the Creative Commons initiative (<u>http://www.creativecommons.org</u>) led by Stanford University law professor Lawrence Lessig, and the file sharing behavior of undergraduates all are instances of the struggle to redefine IP rights and responsibilities in the digital age.

In the research university environment, the issues surrounding the ownership, rights, and management of intellectual property entail more than the stewardship, sharing, and leveraging of the fruit of our collective labors. As stewards of significant amounts of copyrighted scholarly material, university presses need to upgrade and standardize their systems for managing these digital assets and the underlying foundation of contracts, licenses, and agreements. Because

university presses represent multiple interests in the struggle over IP rights and responsibilities, including the public interest, they are well positioned to incorporate and exploit new practices as decisions, policies, and systems continue to emerge.

Issue 6: Effects of the Digital Revolution on Scholarly Publishing

The Committee believes that, as the presses become more involved in digital content and epublishing, they may become more financially viable. As the September 2002 statement regarding the CIC E-Publishing Venture notes (see Appendix E), an e-publishing program gains energy and impact by leveraging the complementary areas of expertise provided by presses, libraries and other campus units. This almost inevitable commingling should be deliberately undertaken by research universities. The Knight Report (2001, 9) notes, "In order to reap the full benefits of this technology, scholars in the humanities and social sciences must also come to recognize digital publication as a legitimate form of scholarly activity. A peer-reviewed article that appears in an electronic venue should be regarded in the same light as one that appears in print. Universities and colleges could accelerate this cultural shift by establishing policies declaring that peer-reviewed scholarly work in either venue is suitable for consideration in tenure and promotion decisions". This is a transition era, and there are many costs related to converting printed books to digital formats.

Several CIC universities are considering institutional digital repositories. There may be worthwhile ways to distribute scholarly books through institutional repositories. The university presses should be involved in these discussions and planning processes. Crow (2002, 6) argues that institutional digital repositories would increase the visibility and prestige of the institution: "…an institutional repository concentrates the intellectual product created by a university's researchers, making it easier to demonstrate its scientific, social and financial value. Thus, institutional repositories complement existing metrics for gauging institutional productivity and prestige."

CONCLUSION

The Committee thinks that scholarly publishing is in a transitional phase characterized by fluctuations, new economic pressures, technological shifts, and new perspectives. Collectively the CIC member universities face an unprecedented opportunity to make substantial changes and improvements in scholarly publishing, but our efforts will require increased communication and coordination among various groups. As we move farther into the 21st century, the situation should become more settled and clear. The issues underlying the current situation in university press publishing are serious and ongoing, and require much broader discussions than those undertaken by this Committee.

As the twenty-four points in the AAUP statement on the value of university presses indicate (see Appendix F), university presses are a valuable resource for colleges and universities, American society, and scholarly communities worldwide. Presses always have been mindful of and responsive to the needs of these three constituencies. Through careful, collaborative planning and thoughtful discussions, the presses and their parent universities can continue the engagement with scholars and the reading public that has been the hallmark of universities and their presses.

REFERENCES AND FURTHER READING

Crow, Raym. 2002. *The Case for Institutional Repositories: A SPARC Position Paper*. Washington, DC: The Scholarly Publishing & Academic Resources Coalition. HTML and PDF versions are available at <u>http://www.arl.org/sparc/core/index.asp?page=f60</u>.

Givler, Peter. 2002. University press publishing in the United States. Chapter 6 of *Scholarly Publishing: Books, Journals, Publishers, and Libraries in the Twentieth Century,* edited by Richard E. Abel and Lyman W. Newlin. New York: Wiley.

Knight Higher Education Collaborative. 2001. Op. Cit. *Policy Perspective* 10 (3) (December). Available as a PDF file from <u>http://www.irhe.upenn.edu/pubs/</u>.

Litchfield, Malcolm. 2002. ...but presses must stress ideas, not markets. *Chronicle of Higher Education* (June 28): B9. Available online at <u>http://chronicle.com/free/v48/i42/42b00901.htm</u>.

McLemee, Scott. 2002. University presses take different approaches to making cuts. Chronicle of Higher Education 49 (4) (September 20): A12. Available online at http://chronicle.com/weekly/v49/i04/04a01201.htm (subscription required).

Pfund, Niko. 2002. University presses aren't endangered... *Chronicle of Higher Education* (June 28): B7. Available online at <u>http://chronicle.com/free/v48/i42/42b00701.htm</u>.

Pochoda, Phil. 1997. Universities press on. The Nation 265 (22): 11-16.

Ruark, Jennifer K. 2001. University presses suffer bleak financial year. *Chronicle of Higher Education* (July 20): A17. Available online at http://chronicle.com/weekly/v47/i45/45a01701.htm (subscription required).

Smallwood, Scott. 2002. The crumbling intellectual foundation. *Chronicle of Higher Education* 49 (4) (September 20): A10. Available online at http://chronicle.com/weekly/v49/i04/04a01001.htm (subscription required).

Thatcher, Sanford G. 1997. *Thinking Systematically About the Crisis in Scholarly Communication*. Available online at <u>http://www.arl.org/scomm/epub/papers/thatcher.html</u>.