Shaping a New Profession

The Role of Librarians When the Library and Computer Center Merge

Robert E. Renaud

n 2004, Dickinson College decided to merge its library and information technology (IT) departments, creating a new division of library and information services (LIS). The division brought together-under the new position of chief information officer (CIO)-seventy staff responsible for library services, networks and servers, administrative computing, instructional technology, and desktop support. Although this change had been discussed for a number of years, it raised questions for many on campus. Why were the departments merged? What were the expected benefits? How would the merger affect librarians, information technology professionals, and other staff? In the months after the merger was announced, the answers to these questions began to emerge as the new organization formed its leadership team, formalized its structure, and established a strategic direction. Although local in nature, this decision responded to broader currents in higher education, currents that were reshaping learning, teaching, and scholarship. For academic librarians at Dickinson College, the merger presented new and often unexpected challenges and opportunities. The new roles made possible by the merger illuminated a set of critical changes that would shape the future of academic librarianship itself.

In the 1990s, the growth of merged library and IT organizations coincided with an explosion in the use of computing in higher education. Two factors fueled this explosion: personal computing and the Internet. Whereas access to computing had once been centralized and controlled through mainframe computers, personal computing gave departments and individual users unprecedented access to computing resources. It also dramatically reduced the cost of computing and removed barriers to entry. By the end of the 90s, the firm grip of the central information technology organization had been loosened as faculty, students, and staff found innovative uses for technology.

The second factor that changed the face of information services in higher education was the emergence of the Internet. Whereas personal computing placed resources in the hands of individual users, the Internet tied those users together in a global network. E-mail allowed users to communicate and collaborate across institutional and national boundaries. Web browsers, such as Netscape, provided an efficient, and even elegant, interface to a growing body of information. These technologies fit naturally into the collaborative, open culture of learning, teaching, and research and spawned new forms of scholarly communication. Academic libraries, in particular, exploited

these technologies in support of longstanding collaborative arrangements, such as interlibrary loan and document delivery. By the end of the 1990s, full-scale digital libraries blurred the distinctions between physical and digital collections and opened up exciting opportunities for scholarly communication.

During this period, it became evident at a number of institutions that these emerging technologies were straining the capacities of the organizations intended to support them. Whereas the new technologies were converging, existing organizational structures remained fragmented. For example, the development of well-designed Web sites called for the skills of librarians, graphic designers, database experts, and security specialists. These skills resided in different departments, sometimes frustrating efforts to coordinate collaborative projects. On campuses with proven track records of interdepartmental cooperation, these barriers could be overcome. However, as organizational silos began to be seen as impediments to exploit the potential of personal computing and the Internet, some colleges began to think of how their organizations might be restructured to facilitate teamwork. For these institutions, merging the library and the computing functions served to align organizational structures with emerging opportunities.

Context

Although mergers of library and IT departments have received considerable attention in the literature, it is important to note that they remain relatively rare. No single entity tracks the number of colleges and universities that have merged these functions. However, the Council on Library and Information Resources (CLIR) periodically convenes meetings of CIOs from "institutions that are CLIR sponsors or are members of The Andrew W. Mellon National Institute for Teaching and Liberal Education." At last count, thirty colleges were represented in this body. As a sample measure of the extent of mergers, 27 of these institutions fall into the Carnegie classification of "Baccalaureate Colleges—Liberal Arts." Given the fact that there are 228 institutions in this category, the colleges that

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Table 1: Mers	gers by	/ Date
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1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	
0	3	5	2	4	1	3	2	4	4	1	

have merged represent about 12 percent of this Carnegie classification.³ The number of mergers per year in this category also indicates a slow but steady rate of growth. Table 1 documents an initial spurt of mergers in the late 1990s, after the four mergers that took place before 1994, followed by a second period of growth in the present decade.⁴ Set against the larger demographic of American higher education, the number and pace of mergers are relatively minor.

Colleges and universities with merged library and IT functions also differ from the overall demographic of American higher education in that they are predominantly private liberal arts colleges. The clustering of merged institutions within this demographic suggests that their common attributes play a role in their formation. These colleges are smaller than private and public universities. As private institutions, they tend to have fewer strictures on personnel practices than publicly funded universities. From the perspective of librarianship, they tend not to have faculty status for librarians. In other words, private liberal arts colleges possess attributes of scale and flexibility that lend themselves to mergers.

The issue of definition also arises at this point in that there is no settled criterion for what is and is not a merged organization. In some cases, it is clear that a merger has taken place. For example, at Dickinson College the LIS division manages the library, networks and servers, desk-

top support, administrative and instructional computing, telephone and cell phone service, and the campus cable television network. The only information service that it does not manage is the design and maintenance of the college Web site. At other institutions the depth of the merger is not as extensive. For example, a number

of universities are responsible for the library and academic technology but not administrative computing. As college and university libraries become responsible for computing functions, the line between merged and non-merged institutions becomes unclear.

Challenges

The merger of library and IT functions within a single organization brings together cultures with different standards, certifications, professional associations, and values. Chris Ferguson and Terry Metz discuss these cultures from an anthropological perspective by describing them as tribes

characterized by different social distinctions, approaches to compensation, and subcultures.⁵ As a profession with a long history and established values, academic librarianship in particular faces a unique set of challenges within merged organizations.

Leadership

The formation of a merged organization is often associated with the appearance of a CIO, although titles and degrees of formal recognition vary from one institution to another. Because at least two departments, the college or university library and the IT department, are merged into a single organization, and there is normally only one CIO, the question of who will lead the new organization naturally arises. This question triggers anxiety for both librarians and IT professionals. Many librarians believe that only those from within their profession can understand their history, standards, and values. Many IT professionals are wary of those without technical backgrounds and worry about their ability to make informed decisions about technology. In practice, the selection of the CIO balances the historic role and stature of the campus library and the need to manage investments in information technology. Given the political weight exerted by the campus library, and the close association of the library with the faculty, the majority of CIOs to

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date have been librarians. Although this has caused some initial consternation among IT professionals, these appointments have in general been successful. In fact, the pace, risk, and expense associated with information technology are such most CIOs spend an inordinate amount of time on IT issues, despite their own professional backgrounds. The issue of who leads the merged organization becomes more contentious, however, when the title of CIO is combined with that of college or university librarian. IT professionals in such merged organizations can ask with some justification whether being a librarian is a prerequisite for the top job. Having said this, it is also important to remember that most merged organizations are relatively young, and that this question will, of necessity, be addressed over time.

Governance

Although intended to achieve cohesion, integration, and alignment with campus strategies, the CIO position concerns some faculty and librarians who believe the library needs to be firmly situated in the academic life of the campus. This concern becomes particularly acute when the library formerly reported to the chief academic officer, or provost. Carla J. Stoffle expresses this concern when she asks what are the "implications for the traditional library values of access, intellectual freedom, individual privacy and equity of service, regardless of ability to pay, in merged organizations?" The concern that these values may be lost as the library is subsumed into a larger entity has some merit. In practice, the attention of CIOs in merged organizations is divided among a wide portfolio of functions.

The risks, expense, and pace of information technology have the potential of distracting the merged organization from the core values cited by Stoffle. This concern, moreover, points to a central tension in merged organizations—that is, the need to balance the demands of widely divergent constituencies in the context of a single organiza-

tion. Whereas a university or college library deals primarily with the academic mission of the institution, a merged organization also supports administrative offices, students, alumni, and relationships with external consortia.

Satisfying the range of constituencies supported by merged organizations calls for highly developed political and managerial skills and for arrangements suited to particular campus cultures. In order to fit successfully into a campus culture, the organization also needs to be aligned with the governance structure of the institution. The history of Dickinson College's LIS division illustrates this point. When the new division was announced, it lacked a corresponding set of campus committees to which it could report progress, seek guidance, and gauge opinion. This fact particularly disturbed faculty concerned that the core values represented by the library would be lost in the shuffle of the larger merger. Dickinson College responded to this concern in several ways. First, it ensured that each function within the division was mapped to the appropriate committee in the campus governance structure. For example, the director of library services continued to serve as a permanent member of the academic program committee. Second, managers in the merged organizations set up mechanisms to ensure close cooperation and communication with the units that they served. Again, in the case of the library, the director became an ex officio member of the provost's cabinet. Third, the division continued the precedent set before the merger of involving faculty, students, and staff in initiatives affecting specific campus constituencies. These strategies ensure that the merged organization honors and supports the values of the academy, including those of academic librarianship. They also suggest that the

responsibility for safeguarding these values extends beyond librarians to the larger campus community.

Organizational Structure

Although college and university libraries and information technology departments differ significantly in their organization, they generally assume familiar structures. While terminology varies from one campus to another, academic libraries often divide themselves according to function, such as reference, technical services, and collection development. Similarly, IT organizations often have help desk and desktop support, administrative computing, and networks and servers groups. The similarities between these

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structures benefit those new to a campus and help communicate roles to the campus community. In contrast, the organizations of merged library and IT organizations vary considerably. I have written separately of Connecticut College's information services division, where I served as associate dean, in which the rare book librarian, the Web developer, and the telephone switchboard operator found themselves on the same team.8 For those outside the organization, these combinations can be baffling. Similarly, they can confuse those in the merged organization more familiar with conventional organizations. For librarians, who have a long and settled history of organizing based on function, merged organizations can seem disorienting and unnerving. In my experience, it is not unusual for some librarians to decide that they prefer not to work in organizations that are so unfamiliar and fluid. Turnover of librarians before and after a merger is therefore not a surprising outcome. Based on my experience, librarians who succeed in merged organizations thrive on rapid change and enjoy working across organizational and professional boundaries.

The depth of mergers also varies considerably. At some institutions, the library and the computer center remain essentially intact and separate and simply report to a CIO. At others, staff and functions are mixed in often unfamiliar combinations. I have conjectured that the ease with which a merged organization is managed varies according to its depth. When units remain intact and separate, they retain their predictability and are therefore easier to manage. When functions are more deeply integrated into new and unfamiliar units, they demand higher levels of managerial skill and imagination. As Stoffle writes, there "is no

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real evidence that the merged organizational structure works any better or worse, or is more cost effective than the separation of the two units." However, anecdotal evidence suggests that the deeper the merger, the more creative and innovative the solutions brought forward by staff working across organizational boundaries. Similarly, and again based on my own experience and on conversations that I have had with other CIOs, I would suggest that deep mergers place unusual demands on those in leadership positions.

Professional Status

Librarians in the United States have long enjoyed a distinct status associated with holding degrees accredited by the American Library Association. For those possessing these qualifications, the term "librarian" is a defined, not a generic, term; hence their occasional frustration over users who confuse support staff or paraprofessionals with professional librarians. Although derided by some as a union card, the ALA-accredited degree sets a consistent standard of professional preparation and establishes an unambiguous qualification for professional positions in academic libraries. In contrast, information technology professionals do not have a comparable formal qualification. They may certainly hold degrees in computer science, or have technical certifications, such as Microsoft Certified Professional status, but these qualifications are not prerequisites for employment in an IT department in the same way that an MLS is a prerequisite for employment as an academic librarian. In fact, some IT staff either have degrees in unrelated fields or no degrees at all. As one IT staff member once said to me, "Librarians are valued for who they are and we are valued for what we do." This overstates the case, of course, but it also points to fundamental tension in merged organizations. Particularly during periods of change, some librarians may interpret rapidly changing roles in terms of a loss in status.¹¹

The issue of professional status becomes even more complicated when academic librarians have faculty, or equivalent, status. Again in contrast to their IT counterparts, academic librarians define this status clearly and publicly. In 2002 the board of the Association of College and Research Libraries provided a definition in its "Guidelines for Academic Status for College and University Librarians."12 Based on statements dating from the 1970s, these guidelines provide standards for professional responsibilities, governance, contracts, promotion and salary increases, leaves and research funds, academic freedom, dismissal or nonreappointment, and grievance. It may be significant in this regard that faculty status is rare in the population of highly ranked private liberal arts colleges in which merged organizations primarily exist. Several reasons for this may be conjectured. First, the pattern of evaluation for librarians with faculty status typically differs from that used for IT staff. This would, after a merger, create divergent evaluation processes for professionals in the same organization. Second, the granting of tenure or tenure-like status to librarians and not to other professionals would create an inequity in the treatment of staff. Whereas, in theory, faculty status for librarians would not preclude a merger, the hierarchy introduced by that status, and the need to extend it to other professionals, would appear to run counter to the fluidity and flexibility that characterize these organizations.

Compensation

As with the issue of professional status, the issue of compensation illustrates the different cultures of academic librarians and IT professionals. With or without faculty status, academic librarians tend to be compensated based on education and years of professional experience. The resulting pay structures tend to be predictable and ordered. Although IT professionals are also normally compensated according to predictable pay scales, they are more likely to be affected by competition from private sector companies. This makes sense when viewed from the perspective of the larger employment market. Academic libraries compete primarily with other academic libraries for the services of librarians. In contrast, college and university IT departments compete in the open market for managers, programmers, and analysts whose skills are highly portable. Because of this, academic librarians and IT professionals differ in their job mobility. An academic librarian is largely limited to working in a college or university library, whereas an IT professional is more able to transfer technical skills to an organization outside of higher education. Private sector competition, therefore, tends to exert an upward pressure on IT professionals' compensation in a way that it does not for academic librarians. However, this effect is sensitive to the state of the overall economy. During the dot-com boom of the late 1990s, colleges and universities struggled to retain their best IT staff in the face of private sector competition. By the middle of this decade, as the high tech sector struggles, IT salaries have stabilized.

When the college or university library and the computing center merge, the issue of compensation is addressed in the context of a single organization. During periods of high demand for IT staff, merged organizations struggle with issues of equity as they attempt to retain highly qualified computing staff. For those responsible for setting compensation, this presents a set of dilemmas as educational backgrounds, years of service, market demands, and internal comparators are balanced. If salaries are based largely on the market, the organization's compensation structure may develop imbalances between academic librarians and IT professionals. If the organization insists on rigorous internal equity, it may find itself unable to retain IT staff during periods of high private sector competition. Unfortunately,

no universal solution exists for this problem. In practice, post-merger managers understand that disparities in compensation are an aspect of their new organizations that will have to be resolved over time.

Mergers and the Future of Academic Librarianship

The merger of libraries and IT units present challenges and opportunities for librarians. As with all organizational changes, staff experience both gains and losses. In joining a larger unit, librarians lose the exclusivity that they have in separate college and university libraries. At the same time, however, they become part of an organization with the ability to respond quickly and with exceptional depth to the needs of the campus. This capacity is particularly exciting as digital technologies converge over the Internet and call for integrated and team-based responses. It is not unusual for staff in newly merged organizations to experience both anxiety and exhilaration as the power of the merger manifests itself. For example, when the division of library and information services was formed at Dickinson College, the need arose to create a new divisional Web site. A team consisting of a librarian, a Web programmer, a database specialist, and a graphic designer was formed and given a charge to create a Web site in several weeks. The members of the team realized that they did not have to overcome the organization barriers that had existed in the past and that all the resources needed to accomplish this goal were within their reach. The librarian assigned to the team took a campus-wide, not only a library-wide, perspective on the Web site, and began to acquire technical and design skills from her new colleagues. She also discovered that she possessed strategies for viewing information unique to her profession, strategies that benefited all users of information on campus. It is not unusual for librarians to state that they had not realized until after the merger how older, departmental divisions had restrained their creativity. One librarian described this sense of liberation to me by saying that "she could never go back" to the old organization.

Although mergers remain rare relative to the larger demographic of American higher education, their success in exploiting the power of converging technologies and forms of scholarly communication have implications for the future of academic librarianship.

Working Beyond the Library

College and university librarians have long worked outside the library. For example, as at most other colleges, librarians at Dickinson College visit classrooms and laboratories, provide bibliographic instruction, orient students to information resources, and give assistance to students engaged in research. Merged organizations have the potential to extend this work deeper into the institution's academic life and even into administrative and business units. As librarians work across boundaries, and as those boundaries disappear within the merged organization, they find that their expertise in organizing and presenting information has applications across the campus. Indeed, their unique understanding of how information spans many domains is aligned with the growing realization that information is a shared resource. The investments that colleges and universities have made in enterprise resource planning products, such as SCT Banner and Datatel, reflect this realization. In the course of implementing these products, managers and staff begin to understand what librarians have always known: that, to be of value, information needs to be organized, preserved, and communicated.

Sharing Space

Academic librarians shape both virtual and real spaces for learning, teaching, and research. Despite predictions of its demise, the college and university library remains a symbolic and real center of intellectual life on campus. In fact, the recent boom in library construction and renovation underlines the vitality of this institution as a physical space. The merger of library and IT functions often coincides with the integration of IT activities in the library building. For libraries with insufficient space to bring all staff and facilities together, departments are scattered across the campus. This is the case at Dickinson College, where the library houses the user services and academic technology departments as well as library services. The networks and servers group and the administrative computing department are in separate building at the opposite end of the campus. At colleges where a merger precedes a new library building, the new facility provides a unique opportunity to bring the new organization together in real space.

Although it may appear to be self-evident that sharing space is beneficial, in practice it can trigger negative reactions. The sense of ownership that librarians have over the campus library can manifest itself in territoriality when a new group is introduced. I experienced this when a librarian asked why desktop support staff wanted to use "her" space for their work. Although this seems to have dissipated over time, a lingering feeling remains that library space should be used solely for library purposes. For me, this reaction highlights how much further we need to go to create a shared vision for the new division. On a more mundane level, sharing space can create friction when disparate functions are merged. For example, the desktop support group requires a secure room to receive, store, and deploy computers. In planning the move of this group to the library, we failed to appreciate the different technical and space requirements of library and computing staff. The strong support of faculty for the library as an

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intellectual space can also cause negative reactions if it is perceived that computers are taking over the building. This points to the need for leaders in the merged organization to communicate the vision of the new organization to campus constituencies and to explain how the use of space supports that vision.

Working across Professions

After a merger, academic librarians move from being the dominant profession in a college or university library to being members of one of many professions in a new organization. Although some librarians experience anxiety during this transition, most find contact with complementary professions rewarding. In focusing on shared goals, librarians begin to see problems through the lens of other professions. Working closely with other staff can also remind librarians of the unique values and qualities of their profession. Instead of being subsumed in the new organization, librarians bring a unique set of skills and perspectives that can be applied across the campus. In my experience, librarians who succeed in transitioning to new roles see themselves as information generalists who are able to adapt their skills to a wide variety of assignments,

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both within and beyond conventional library services. They also, on occasion, leave conventional library roles altogether, essentially changing their profession. For example, one librarian at Connecticut College became a systems project administrator, a role formerly performed by an IT professional. This role leveraged his understanding of how information is organized on campus through learning a database technology. By encouraging staff to work across boundaries, merged organizations blur distinctions between professions, creating opportunities that might not otherwise be identified.

Defining a New Profession

During recent decades, librarians in all academic libraries have redefined what is and is not professional work. For example, original cataloging was once the exclusive preserve of librarians. As copy cataloging became available over computer networks in the 1970s and '80s, this work began to migrate to support staff. Indeed, the increased availability of bibliographic data blurred the definition of

original cataloging itself. In the cataloging department of one university library in which I worked, support staff provided the bibliographic description, whereas only librarians could assign call numbers. When the basis of a call number existed, senior support staff could complete it, but only those at a specific pay grade. Although such fine distinctions seemed fussy to some, they attempted to demarcate the roles of professional librarians and support staff and to ensure that responsibilities were matched to levels of compensation.

Librarians in merged organizations experience even more dramatic redefining of their work as they cross professional boundaries, respond to emerging opportunities, and serve on cross-functional teams. As a result, they leave behind any sharply defined sense of what is and is not library work. One librarian with whom I had worked began to serve on a team designing Web pages and developed technical skills in hypertext markup. This led her to explore database technologies and programming. The freedom afforded by the merged organization transformed her job and led her away from conventional library services. This did not, of course, mean that she stopped being a librarian. Rather, it led her to see herself as an information professional trained in the discipline of librarianship who was able to learn new skills and adapt readily to new roles.

In doing so, she entered a space shared with programmers, instructional technologists, and database specialists while at the same time retaining a unique professional identity. Ferguson and Metz refer to this as the "third space" that is "galvanized by a vision and values that draw on the best of both previous organizations, help each other to identify with the other, and

motivate all to participate in building something new that would not have been likely otherwise." ¹³

Learning to Merge

The design of Dickinson College's merged organization benefited from the experience of other institutions that have undergone similar transformations. It also responded to the unique history and culture of the institution. Unlike many other merged organizations, its structure retained a familiar shape. In fact, it left elements of its predecessor departments essentially intact. This gave the new organization time to recruit a new leadership team, clarify responsibilities, and build teamwork across departments. It also addressed an underlying anxiety relating to the library's role. As the library asserted itself as the intellectual center of the campus, and particularly as its new information commons was built, some worried that its historic focus on humane and scholarly values might be lost. In response to this concern, the merged organization clearly delineated the library's centrality and its relationship to the

academic program. This allowed the new organization to develop organically over time, as faculty, students, and staff adapted to the emerging opportunities afforded by information technology.

Although merged organizations need a number of years to coalesce and become truly effective, the LIS division demonstrated positive outcomes to the campus community in a matter of months. Dramatic improvements first became visible in the area of IT services. The help desk, once derided as the "helpless desk," replaced student workers with full-time staff to manage initial contacts, installed an incident reporting system, and began monthly surveys of user satisfaction. A survey conducted one year after the merger indicated, for example, 91 percent of respondents strongly agreed with the statement that "staff was responsive and requests were completed in a timely manner" and 85 percent reported strong overall satisfaction with the service. After an analysis of the administrative computing system used by the campus, the LIS division recommended, and the trustees of the college approved, a project to install a new system. As the most ambitious and comprehensive computing initiative ever undertaken at the college, the project benefited from the merged organization's ability to mobilize staff and resources smoothly and rapidly. Similarly, the networks and servers group upgraded the campus network to support project management, team collaboration, shared calendaring, and mobile computing devices, such as the BlackBerry.

Library services also benefited by being aligned with the activities of the larger division. Although the library had a longstanding and successful liaison program for academic departments, it was isolated from other information services. After the merger, the LIS division assigned three staff to each academic department to act as liaisons for library services, academic technology consulting, and desktop computing support. These staff worked in teams to ensure that information services were being delivered in an integrated manner. The library's information commons, which had suffered in the past from inconsistent technical support, benefited from the arrival of the desktop support department in the library. After years of inaction before the merger, a wireless network was installed in the library. The library's archive and special collections team exploited their new access to computing staff and resources by expanding their efforts to digitize the college's unique collections and by working with faculty interested in communicating scholarly information over the Web. Librarians also teamed with academic technology professionals to support Dickinson College's distinctive program in global education and language instruction. These activities continued to take place in a library building that celebrated learning and scholarship through public readings, performances, and symposia.

For librarians at Dickinson College, the themes of working beyond the library, sharing space, and working across professions unfolded over the first year of the merger. For many, the changes were imperceptible. After all, as in the past, the library opened and closed, books were cataloged, and reference service was provided. More subtly, librarians began to work outside the main library more frequently, cooperate in the operation and support of the new information commons, and work on teams with new colleagues. Although no librarian stopped thinking of himself or herself as a librarian, the definition of that role began an evolution that accommodated new forms of scholarly communication and even extended the profession's expertise to areas of the college beyond the academic program. It appeared even at this early stage that the "third space" opened up for librarians by the merger would create a multiplicity of roles and opportunities that would not have been possible had the change not occurred. For librarians confident in their profession and determined to exploit the potential of the merger, there was indeed no looking back.

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have never merged library and computing services. Typical of larger institutions, support services tend to be more decentralized and functionally aligned with individual schools and departments . . ."¹⁹ Chapter 2 is a review of the "Readings on the Marriageability of Libraries and Computing Centers," starting with an article written in 1979. The entire book is useful reading about various types of relationships of libraries and computing centers.

The current EDUCAUSE CIO Constituent Group electronic discussion list (cio@listserv.educause.edu) includes discussions of a range of topics of interest to CIOs. In fall 2004, the subject of the "Profile of the CIO" was considered, and discussions included such topics as faculty librarians reporting to the CIO and the importance of the local university culture as a factor in determining the viability and role of a CIO position. It is a useful forum for an inquiry about specific issues related to CIOs and academic research libraries.

In conclusion, the quantity of literature related to the subject of CIOs and academic research libraries seems to reflect the level of interest in the topic during a particular period. From 2001 to the present, the number of academic research libraries reporting to CIOs has declined as compared to the 1990s, and the available literature has declined during the same period. However, the CIO position as related to academic research libraries is still a topic of interest, as evidenced by recent list discussions, the fairly recent ALA publication by Hardesty, the dissertation by Fuller, and discussions on some campuses.

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