

Preferred Futures for Libraries:

**A SUMMARY OF SIX WORKSHOPS
WITH UNIVERSITY PROVOSTS
AND LIBRARY DIRECTORS**

by Richard M. Dougherty and Carol Hughes



The Research Libraries Group, Inc.
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FOREWORD

The report that follows is the result of a long process in which the only constant was the desire of the Research Libraries Group to bring together directors of research libraries with their chief academic officers. It was our conviction, confirmed on numerous occasions by the librarians represented on the RLG Board of Governors, that the issues library directors were facing could only be successfully engaged with the mutual understanding and support of the academic administration.

Billy Frye, provost at Emory University, was the catalyst and motivating force in making these gatherings possible. He urged the task on us, helped to plan it, and was instrumental in securing the participation of his fellow chief academic officers. From initial conception, we wanted to have small gatherings of librarians and provosts. Originally, we expected them to address the extraordinary and mounting challenges of the research information infrastructure—increasing complexity, escalating costs, and the need to transform the nature of libraries and the model of library service.

Our early model was to hold a series of one-day regional workshops that would formulate a set of strategic directions to serve as a framework in which campuses could address the way universities and their research libraries operate. This, of course, is a goal that is not peculiar to RLG member institutions, and from the start we took steps to be sure the sessions were not specific to RLG. To organize and operate the sessions we retained Richard Dougherty and his colleague Carol Hughes from the University of Michigan School of Information and Library Studies. We then assembled an advisory committee comprised equally of leaders from institutions within and outside of RLG.

Our advisory committee consisted of:

Sterling J. Albrecht, University Librarian, Brigham Young University;

Jerry Campbell, University Librarian, Duke University;

Billy E. Frye, Vice President, Academic Affairs, and Provost, Emory University;

Kenneth Gros Louis, Provost, Indiana University;

Paul H. Mosher, Director of Libraries and Vice Provost, University of Pennsylvania;

Barbara von Wahlde, Associate Vice President for University Libraries, State University of New York, Buffalo;

James F. Williams, Library Director, University of Colorado at Boulder.

In working with Dick Dougherty, we decided to focus the workshop on issues related to implementing the logical library. Many of the challenges that need to be met are captured in this phrase. It suggests the period of transition in which the contemporary research library finds itself — a time when it must move with minimal disruption from a library model directed primarily at ownership of materials to one in which access and delivery play a more central role. Our initial instinct was to organize the sessions around this theme and support the discussion with a series of issues papers. We would guide ourselves in the choice of specific issues through the advisory committee.

However, after meeting with the committee and reviewing issues papers, we all concluded that this kind of seminar format would not be the most productive approach. In our drive to identify strategic directions we had been presuming that librarians shared a common vision of the future and, more importantly, that chief academic officers also saw the future similarly. We realized that we had to test that proposition before there could be any productive discussion of broad strategies or the development of any kind of national action agenda.

Therefore, rather than stipulate the future, we organized the workshops to elicit from the attendees their vision of the future of academic information systems. Six day-long sessions were held, made possible by funding from the Andrew W. Mellon Foundation. The results of the discussions are reported in the following pages. As so often happens, the most interesting things we discovered were not necessarily what we set out to find.

James Michalko
President, The Research Libraries Group, Inc.

EXECUTIVE SUMMARY

Provosts and librarians share an image of the future of information resources on their campus. They all strongly prefer a future in which there is universal access by faculty and students to multiple information sources in all possible media via a single multifunctional workstation. Other images of a preferred future are jointly held — all require basic cultural changes in the academy beyond the control of library director or chief academic officer.

The sponsor and facilitators of these workshops observe that there is considerable misunderstanding between chief academic officer and librarian about the acceptable degree of risk-taking, the difficulty of the transition, the leadership that is demanded, the impact on space and faculty needs, and the role of cooperation and resource sharing in achieving this preferred future. No common strategies that apply across campuses are likely, and individual institutions have not yet successfully defined the elements of a solution that fits their unique circumstances.

Eventually, some concrete response to demands from students and faculty for a more highly sophisticated information environment will be necessary on every campus. Leadership in the articulation of campus priorities, innovation in the development of demonstration projects, and long-term strategic relocations of resources from various sources will be required if the vision of the future is to be more than a mirage.

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INTRODUCTION

The resources of American university libraries represent a national asset of incalculable value. These comprehensive collections were built to serve the needs of current and future scholars. Throughout the recent period of collection development, growth and size of collection have served as primary measures of a library's, and a university's, quality.

The growth years enabled university libraries to develop rich collections that became challenging to organize, expensive to house, and complex to access. During this period a culture evolved that defined the role of librarians as collectors and preservers of the scholarly record rather than as active participants in the research enterprise.

A new era is now upon us. Information technologies are prompting new services, roles, and relationships. The concept of the virtual library, i.e., a library that provides access to electronic and print materials from many sources, both local and remote, has achieved a widespread popularity. But the realization of the potential of the virtual library requires much more than changes in the operations within one individual library. As the academic community grows in dependence upon electronic publications and electronic bibliographic access, the interests and areas of expertise of the faculty, computing center, and research library become increasingly intertwined.

The growing presence of information technologies has created particular tensions between the traditional values of academe and the new roles and responsibilities envisioned for libraries and computer centers. The library and the computing center, with different organizational histories, different staff expertise,

and different funding structures, now find themselves charged with providing information support that neither of them can fill well without the other. Collaboration is an uneasy process in highly competitive institutions. And it is complicated by the fact that the necessary support for decision-making and resource allocation is often widely dispersed in the decentralized academic environment.

Universities are also faced with grim financial realities, and many officials believe that universities have entered a long-term period of tightly constrained economic resources. The demand for campuses to invest in diverse electronic formats and the equipment necessary to use them has come at the very time when costs of traditional library materials are rising at unprecedented rates. The critical question is, how can universities, libraries, and computing centers respond to create new and more effective information environments in this period of fiscal restraint?

Faculty opinion has traditionally been a key element in orchestrating successful change in higher education. Faculty attitudes will have a major impact on determining the nature and scope of future information environments in higher education. Electronic information resources are already disembodying the record of scholarship and removing many of the barriers of space and time between scholars and access to information they need, but there is still no consensus among most faculty as to what is an acceptable rate of change—or even that there is any need for change in the role of librarians and libraries.

Some librarians now see the need to reevaluate the old model of self-sufficiency through centralized collections for which libraries serve primarily as caretakers and organizers. One oft-heard preference is for librarians to adopt a new role that includes the provision of customized information services as well as access to remote resources in many formats. If such roles were adopted, collaboration and coordination with other units across campus and outside the university community would be essential to success.

Library collaboration among campuses is frequently urged as a primary strategy for meeting the rapidly growing demands for information resources. Great strides have been made in developing national collaborative programs in areas such as preservation and bibliographic description. However, no models producing fundamental changes in the way local collections are developed or in

how resources are shared among research institutions exist. Collection self-sufficiency is still the dominant operational philosophy of most research universities, even in the face of certain and severe financial constraints. Even with the increasing power of technology to improve access to and delivery of information and documents, when push comes to shove, faculty want materials on campus. They don't want to be dependent on other distant libraries for needed materials. Many of them also, because of the structure of their disciplines, still depend on at-the-shelf browsing. Efforts by librarians to de-emphasize ownership are interpreted as a failure to understand both the political environment and legitimate differences in research methodologies among disciplines.

The period of forthcoming change could be characterized as the transition from the physical library to the logical library. This simple phrase describes a fundamental change in library operations that will affect everyone from undergraduates to senior faculty. It will affect the way teaching and research are conducted. The nature of change on individual campuses, however, will reflect local missions, traditions, fund availability, and the nature of attitudes among faculty administrators and library staff.

There is no consensus as to what the future holds for research libraries. There is general agreement that technology will play a profound role, but the specifics remain much less clear. A key player in making change possible is the campus chief academic officer (CAO). Most library administrators would argue that it is essential that a close partnership be developed between the librarian and the CAO. The need for both better understanding of the issues and better communication between these two offices was the motivating factor for this series of workshops.

THE WORKSHOPS AND THEIR ATTENDEES

Funding from the Andrew W. Mellon Foundation underwrote a series of six workshops, sponsored by the Research Libraries Group and organized and facilitated by Richard M. Dougherty, professor, and Carol Hughes, lecturer, of the School of Information and Library Studies, University of Michigan. The workshops were designed to explore the degree of congruency between the preferred vision of the research library as viewed by librarians and chief

academic officers. Over 60 librarians and CAOs from 41 institutions met to discuss what sort of future they would like to see evolve on their own campuses, what obstacles to their visions would have to be overcome, and what tactics might be effective in meeting campus objectives.

Participating Institutions

Brigham Young University	Temple University
Brown University	Tulane University
Colorado State University	University of California, Irvine
Dartmouth College	University of Chicago
Emory University	University of Colorado, Boulder
Georgetown University	University of Georgia
Georgia Institute of Technology	University of Illinois at Chicago
Georgia State University	University of Maryland, College Park
Harvard University	University of Miami
Indiana University at Bloomington	University of Michigan
Johns Hopkins University	University of Minnesota–Twin Cities
Kansas State University	University of Nebraska–Lincoln
Louisiana State University	University of New Mexico
Massachusetts Institute of Technology	University of Notre Dame
Michigan State University	University of Oklahoma
Ohio State University	University of Pennsylvania
Princeton University	University of Rochester
Purdue University	University of Southern California
Rice University	University of Tennessee, Knoxville
State University of New York at Binghamton	Wayne State University
State University of New York at Buffalo	

The workshop organizers hoped the meetings would provide attendees with a better understanding of the issues involved in creating a new information environment and would begin to identify factors needed to create collaborative collection building and access programs. Since the series of workshops was unprecedented, the organizers could only speculate on how much could be achieved during a single six-hour meeting. Our objective was to provide enough information to facilitate subsequent campus-based planning.

The workshop methodology employed by the organizers was based on a process devised by Ronald Lippitt, a founder of the Institute for Social Research at the University of Michigan. The process helps participants examine the future without getting bogged down by existing day-to-day problems. It is organized into multiple steps. The initial steps include a brief review of what has been accomplished in recent years, current developments, and identifiable trends. Participants are given opportunities to identify what are their preferred futures. The process is not an effort to predict what the future will be, but, plainly and simply, to imagine what one would like it to be. The process forces participants to identify the obstacles that most likely could impede progress. Given sufficient time, it is possible to transform images of preferred futures into the elements of an action-oriented plan.

This report provides a thumbnail sketch of what occurred at the six workshops. It includes glimpses of what the participants viewed as current accomplishments on campus, issues that continue to concern officials, trends the various groups foresee, and a sampling of the visions that emerged. The report offers general observations that summarize the impressions of the workshop organizers and concludes by suggesting possible next steps.

One original purpose was to provide opportunities for CAOs and librarians to explore jointly library-related issues. The organizers hoped to learn what provosts really felt about libraries and their future roles, and what were their attitudes about information technologies. It is essential for librarians to hear firsthand how CAOs view the future. Librarians are technically knowledgeable about the issues, but many are not sure where their provosts stand.

Why did the provosts attend? What did they hope to accomplish? Most said they came to listen and learn. Their objectives fell roughly into the following categories:

- **Communications**—to create a librarian-provost dialogue to improve campus communications. Several provosts commented that their motive was to “play catch-up, because I’m a new provost.” Others expressed interest in learning what other campuses and libraries are doing.
- **Planning**—to identify what steps are necessary to facilitate the creation of a new information environment. They hoped to leave with a clearer vision of the future.
- **Costs**—to assess what costs are involved. Campus officials are particularly worried about costs as they face increased demands for resources. While the information technologies may promise unparalleled levels of information delivery and access, CAOs want to know how much this will cost. Some would like to know what librarians are willing to give up in order to adopt new tools, or, stated in another way, what can be cut back but still provide the same level of services. There is also interest in learning more about how other campuses are grappling with issues of limited resources.
- **Cooperation**—to seek ways in which universities and their libraries might extend cooperation and to learn how groups of libraries might improve cooperative activities. A few participants specifically mentioned cooperation between the library and the academic computing center. It was also observed that libraries and library services were no longer individual university problems and that a collective approach is now absolutely essential.

EMERGING TRENDS

Identifying future trends is usually one step in the process of examining and developing future visions. This workshop was no exception. A list of thirteen trends was presented simply to instill participants with a future orientation; participants were invited to add to this list. Many trends were added, but no attempt was made to prioritize them. Protracted discussions of trends were avoided because experience shows that such discussions can quickly generate lists of problems that block a participant's ability to envision an energetic future scenario. The first step was to generate the preferred futures.

Trends that will most heavily influence a particular campus's preferred future become clear in the process of transforming visions into action-oriented plans. The unprioritized list compiled during workshop sessions included the following:

- **Developing the National Research and Education Network**
- **Strengthening undergraduate education**
- **Increasingly constrained budgets**
- **Proliferating information sources and spiraling costs of materials**
- **Pressing space and facilities maintenance needs**
- **Changing scholarly communication system**
- **Expanding international studies and programs**
- **Increasing interdependence of library and computing center**
- **Decreasing prestige of higher education in society**
- **Growing difficulties in recruiting and retaining personnel**
- **Shifting student demographics**
- **Building relationships with the commercial sector**
- **Growing importance of government relations**

PREFERRED FUTURES

The Universal Workstation Environment. The wired campus, with workstations universally available, was an image that emerged at all of the workshops. For the sake of brevity, this image will be referred to as the universal workstation access image. It encompasses the concept of “seamless” or “transparent” access by faculty and students to a variety of resources from multifunctional workstations.

Considering the degree of exposure that the electronic environment has received in the literature, it is not surprising that this image repeatedly surfaced. A variety of versions were projected: an integrated library/computer facility, transparent to the user; comprehensive access to national databases in all formats; information “virtually” accessible in one place; workstations for everyone for all of the information needed; a universal terminal that can handle multimedia in all formats; workstation access to all media—in many locations; universal access to databases, regardless of user and resource location.

This image remained central even though participants also identified some formidable obstacles. For example, there were concerns about the cost of the technologies so essential to create a workstation environment; rapid obsolescence of technology; the myth that technology will solve all of our problems. Librarians referred numerous times to their fear that officials possessed an oversimplified view of the future library as one without books. Nonetheless, these reservations aside, there seemed to be little disagreement that some version of the universal workstation access image represents what is collectively the groups’ preferred vision of a future campus information infrastructure.

Most participants saw the library playing an important role in any evolving electronic campus environment. In fact, it was this assumption that led to the second image cluster.

The Community of Scholars and Librarians. Four groups developed images of a community of scholars as another preferred future. This image emphasized a strong role for librarians as part of a team composed of faculty, students, and researchers. Variations on this theme were offered: full integration of the library into academic programs; librarians working with faculty and students designing teaching materials and research programs; libraries as hubs

where scholars gather; library and librarians more integrated into the academic culture; librarians and teaching faculty collaborating in scholarly communication and teaching; and a community of scholars where distinctions among professors, graduate students, and undergraduate students are less important.

The participants recognized that the growing complexity of information environments requires greater expertise. This development was judged an opportunity for librarians to use their knowledge about information to provide personalized service to faculty and students. The renewal of interest in teaching by faculty might also stimulate more collaborative learning and research. Library staff were frequently lauded as a resourceful group dedicated to service and ingenious in their use of limited resources. But participants also pointed out that there is currently a definite lack of linkage between academic programs and the library. The campus community's attitude about status and perceptions of librarians' expertise were also mentioned as critical blocks to be overcome.

Enriched Measures of Success. Another image was stimulated in part by the primary focus on universal workstation access. The emphasis of this image on services and performance revealed the need to develop a new definition of library quality. The question was, could a library's success be measured in qualitative rather than quantitative terms? How much library is enough? was asked. In this scenario, the local university evaluates the library on qualitative criteria related to service measures. The major obstacles to achieving such a state include reliance upon the traditional measures by which libraries are judged, and an inability to articulate the relationship between library services and academic mission or faculty productivity. However, without a library reward system predicated on a new schema of service values, it was unrealistic to expect changes in human behavior, regardless of the technological possibilities that might evolve.

Other Images. Dozens of other images were projected. For example, a campus without cars; an environment in which academic departments had given way to a truly interdisciplinary environment of collaboration; a campus community that reflected representative numbers of women and minorities among faculty administrators and students; a higher education environment that had regained public respect; campuses working in harmony with surrounding communities; and, of course, a campus whose strategic plan had really worked.

GENERAL OBSERVATIONS

The images developed at the workshops involve basic cultural changes beyond the control of either the library director or the CAO. Confronting all of these changes will be a large and unsettling task. But the librarian and the CAO will bear a large share of the responsibility for creating campus information environments for the 21st century. These two officers must become allies in the creation of change strategies and partners in the work to accomplish these reforms.

Over the course of time we heard many statements of opinion and fact from the participants. Some underlying themes began to resonate with us as we heard the discussions at each site. The following observations are our own, based on those of the workshop participants. They derive from conversations heard and overheard as the sessions progressed, and they represent our assessment of the underlying issues that librarians and CAOs will have to confront.

Risk Taking. Most of the images clearly reflected a conviction that technology will dramatically change libraries. Some provosts and the majority of librarians seemed to prefer to see the library continuing to play a central role. But it was also acknowledged that not only libraries will change—librarians must overhaul many of their traditional roles to remain in the game.

This is not a new observation. But the workshops emphasized that CAOs are ready for the change now. Several provosts asked pointed questions of the librarians at the meeting: What are librarians willing to give up? What do they see themselves not doing in ten years?

The opportunity to fill a central role is still open, but the library community itself must proactively identify and adopt new and changing responsibilities. Librarians cannot wait for permission to change what they are doing. CAOs want to see change, but they don't have the time to engineer it personally—librarians will have to take the risk. That was a message we heard loud and clear.

Transitions. Another significant observation concerned the widespread lack of vision about how we get there from here. The workshops did not provide sufficient time to transform preferred futures into pieces of an articulated action plan. But it was apparent that few people had given serious thought to the costs of operating parallel print and electronic systems during the transition years. In most instances, the conversation came to an abrupt stop when someone asked, "Who will pay the bill?"

Only one CAO mentioned that his campus was working to involve faculty in discussions about the new environment. Usually there were no answers to questions such as: How will transition strategies reflect the differences in information structure among disciplines? How will one convince faculty to tolerate the transition from the traditional library to one in which there is a greater balance between ownership (local collections) and access (acquisition on demand from other sources) to information? What services will the campus faculty permit the library to reduce or terminate?

Very few campuses seem to have thought through these questions, which unfortunately represent only the tip of the iceberg of "universal access." One is left with the general impression that, in spite of what campuses term "strategic planning," efforts to date have fallen dramatically short of what will be required. More likely, campuses are identifying strategic directions they wish to pursue, but they have not yet become specific about what resources are necessary and available to get them to the future they desire.

Leadership. Change of the magnitude envisioned by the participants requires a hospitable climate, but it is unlikely that such climates currently exist at most campuses. In this context, one might ask the questions: How knowledgeable are provosts about information issues? How knowledgeable must they become before change is facilitated? Is it realistic to expect them to become knowledgeable in light of the multitude of diverse and complex campus issues that they must address?

The rapid turnover of CAOs at many campuses has, in the opinion of one librarian participant, created a leadership vacuum. Some feel that this rapid turnover leads to a reluctance to make the long-range commitments required for the creation of a new information environment. Considering the number and complexity of information issues to be addressed, most provosts will have to rely

on others for advice. That being the case, the turnover among provosts could be viewed as a propitious opportunity for librarians to play leadership roles in reshaping campus information environments and to nurture the required partnership with the new academic leadership.

Space and Facilities. Some CAOs assumed that the growing availability of electronic information will obviate the need for paper-based resources. Librarians were quick to point out that access is only one part of an ownership/access model—ownership will still exist and print-based materials will be necessary for many years to come. The global publishing community is not prepared to move into a totally electronic environment, and certain disciplines will not shift to electronic texts as quickly as others. The task of organizing and preserving paper-based resources will not quickly disappear.

The need for continuing acquisition of paper materials has significant space implications. The lack of clarity on the part of CAOs about the continuing need for library space was apparent. Library buildings are expensive, and older campuses have limited ground for expansion. Space planning is an issue that obviously merits more discussion between CAOs and librarians.

Cooperation and Resource Sharing. The universal workstation environment will inevitably become a reality. The questions are, when and at what cost? Campuses that wish to facilitate the process must first create an environment that fosters a massive change in campus attitudes on two levels.

First, for a decentralized campus to move toward a universal workstation model it must build a broad base of campus support and be able to demonstrate the operational efficacy of new models of information delivery to the entire user community. The need for demonstrated success becomes even more critical when funding is in short supply, and many among the user community perceive that they will be losing access to traditional programs and services without any commensurate gain in reliable systems which meet their current needs.

Second, academic officers frequently talk about the importance of libraries cooperating, but rarely do they understand what is involved interinstitutionally and what type of infrastructure it takes to make cooperation work. Interinstitutional competition is not overtly acknowledged as an inhibitor to the process. Cooperation has traditionally been a library issue. It's clear that this must become a campus issue, not only as it relates to information resources but to academic programs as well.

Cooperation was rarely mentioned by workshop participants as a key strategy for achieving their preferred futures. While there are a few notable instances where librarians are working with close neighbors to create improved document delivery or limited cooperative collection-development projects, a general lack of interest in cooperation beyond the most peripheral programs was apparent. Librarians may believe cooperation has achieved success, but in the eyes of the CAOs, cooperative activities have many miles to travel and many promises to keep before success is achieved.

Technology Oversold. Some participants felt that technology has been oversold. While no one challenged the capabilities of technology, no one demanded that the spread of technology be closely tied to the success of the university at its mission. Without understanding how investments in technology are related to gains in campus productivity, there will be no way to balance information-related priorities with other needs. This balancing will have to be done. The enormous costs of creating a sophisticated network environment and replacing obsolescent equipment are already forcing institutions to make decisions without understanding a critical part of the tradeoffs involved.

Educational Preparation and Training of Librarians. The suggestion of new roles for librarians and the advocacy of risk-taking behavior raised issues about the educational preparation and training of librarians. This issue is now being hotly debated among library school faculty and professionals. There is a concern that the profession is increasingly unable to attract the best and brightest, even though library schools report an increasing number of well-qualified candidates. Educational preparation of librarians will continue to be a priority concern throughout the 1990s, and frank conversations between library educators and practitioners about the nature of this education must take place now.

NEXT STEPS

A basic assumption of this report is that there are unlikely to be any solutions devised which are universally applicable to all campuses. Campus strategies will, in large part, reflect the local missions, traditions, availability of funds, and prevailing local attitudes. Each campus needs to identify its own preferred set of images, not only to plan a new campus information environment, but also to chart other aspects of the academic enterprise.

Some campuses may decide to “sit this one out.” The path to the universal workstation access image is not at all clear, and realizing this vision will be a perpetual work-in-progress. No models currently exist that take into account all the factors that are changing the nature of research at different rates within different disciplines. Some universities with a heavy emphasis in engineering or the sciences have been able to make larger investments in focused ways, but most comprehensive universities have not been able to get beyond the rhetoric of the vision.

As competition for students and faculty increases, some concrete response to demands for a sophisticated information environment will be necessary on every campus. Funding the initial investment and ongoing costs of the universal workstation environment in a constrained economic environment will require a significant redeployment of campus resources. How can a campus set the stage for such a shift?

We will not repeat recommendations that are apparent from the comments made in the “General Observations” section. However, we would like to end with a clear call to action. The unanimity of support that the universal workstation environment found in every workshop indicates that the problem is not in choosing the path, but rather in which step to take first.

Faculty support is a primary ingredient for success on most campuses. It is not realistic to think that the faculty can be brought on board all at once—the technology, the publishing industry, and their own unique interests are not likely to lead to the necessary degree of congruence. Individual projects, carefully planned and staged in increments, may have the best chance to convince the faculty that they can safely come to depend on a new model of information delivery. Without demonstrable proof of the efficacy of new services, it is likely

that the cultural and political challenges will overwhelm progress towards any campus's goals.

By information delivery we do not mean document delivery. In moving away from document-based services to information services, the most effective approach may be to separate demonstration projects from the established bureaucracy of the library or the computing center and give them a home outside the turf and routines of either organization. Building on the experience of those who are reinventing campus information services by looking first at the way information is used within the community, and then devising services that meet the observed but as yet unarticulated needs of users, may well require a new organizational structure.

There is probably not enough money available from a simple reallocation process in any campus library to fund a major shift in operations. Libraries have been experiencing lean years for some time now and most have no significant reserves left. The task of keeping traditional acquisitions and services operating cannot be completely abandoned. The resources of the library and the campus computing center currently available may provide some reallocation possibilities, but to achieve success as currently envisioned, new money will be necessary. If demonstration projects are carefully chosen, they can gradually ease the way into long-term reallocations. Over a period of years, these can significantly reshape budgets while they contribute to the achievement of a campus's strategic plan. For example, ten years ago the amount of money spent on preservation in most libraries was negligible. With an infusion of new money from a variety of sources, funding nationwide has increased substantially, resulting in local library reallocations over time of significant proportions.

One key factor in a campus's achievement of its desired future is the state of the university's strategic plan. If, as we suspect, most plans are closer to being statements of strategic direction, it will be harder to identify the type of activity that should be pursued with seed money. On the other hand, experimenting with various projects may help to clarify which strategic directions have priority for the community.

An essential ingredient in progress is leadership. Earlier we observed that collaboration has been regarded as a “library” issue, and in fact the most successful examples of collaboration in the information arena are library-to-library. It’s time to expand that sphere to the institutional level with the CAOs taking the lead. It’s time for the library directors to take the lead in building new collaborative relationships with faculty, information technology directors, computing center administrators, publishers, and other information providers. Enriched by this expanded universe of partners, the CAO and the library director will be better positioned to shape the future of their own campus. They will have to be partners in managing the political and funding challenges inherent in a major shift of organizational resources. Although the issues currently confronting higher education are pressing and profound, few have the potential to more deeply affect the academic culture and organization than the journey toward universal workstation access.

