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Librarianship in the Twenty-First Century

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Using the life and work of Arna Bontemps as a case in point, Thompson examines the relationship between the formation of racial identity and the culture of educational institutions themselves, not merely the intellectual, cultural, and political traditions imparted by them.

Selections from the diary of the poet Marya Zaturenska reveal her struggles as a woman and an artist, and provide glimpses of the intellectual scene in New York and London during the depression.

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Librarianship in the Twenty-First Century

BY PATRICIA M. BATTIN

Patricia Battin, Litt. D., received the National Humanities Medal for her work as founding president of the Commission on Preservation and Access (1987–1994) and as vice president and university librarian at Columbia University (1978–1987). During Commencement Weekend 2000 Battin was awarded an honorary doctorate from Syracuse University, where she had acquired an M.L.S. in 1967. At the request of her sponsors, University Librarian Peter Graham and School of Information Studies Dean Raymond von Dran, she also gave a lecture in E. S. Bird Library. Following is her edited text of that lecture:

THROUGHOUT MY LIFE, I have been allergic to revisiting my various *alma maters* in the vain attempt to rekindle the memories of the past. But this visit is different—I am honored and delighted to return to Syracuse to receive an honorary degree.

I was struck, as I often am when visiting universities, by how invisible the enormous technological changes of the past thirty years continue to be on academic campuses. I received my library degree in 1967—the year that the Library of Congress initiated their automated cataloging process. And the whole world of librarianship —that I had just prepared to enter—began the process of fundamental change that is still with us today. From the outside, we looked like the same enterprise—we bought books, we cataloged books, we circulated books. To my dismay, throughout the ensuing thirty years, while libraries were struggling to cope with the information technology that was transforming our world, academic institutions continued to deny the transformational potential of the new technology.

That apparent paralysis was so puzzling to my colleague, Brian Hawkins, and me that we edited a book—*The Mirage of Continuity* (1998)—to explore the reasons for the apparent belief that life in academia would continue to go on in the traditional mode of slow, infrequent, evolutionary change. Our basic thesis is that although

academic communities have finally been compelled to accept "change" as a dynamic fact of life, we are still forecasting the future through our knowledge of the past and present; or as one anthropologist has put it, reasoning from contemporary knowledge, basing our prognostications on our experience and current perspective.[1] That process is useful only in a relatively stable environment, one in which the traditional assumptions still prevail.

Linda Schele and Mary Ellen Miller, in their book *The Blood of Kings*, note that the ancient Mayans believed that the gods blinded men so they could only see things nearby. This belief found uncanny resonance in the history of research into the Mayan culture. Initial interpretation of the artifacts, viewed from an early twentieth-century perspective and the tendency to reason from contemporary practices, underwent drastic revision with the advent of the new tools of radiocarbon dating, pollen studies, and aerial photography.

The authors say of current scholars of anthropology: "Like those first men, our vision, too is dimmed. We can see only what is close at hand or what is passed [*sic!*], not what lies ahead. Like all those who have come before us, we are bound by historical perspectives that will be clear only to our successors.[2]

One of our most difficult challenges is to imagine the future from a twenty-first-century perspective, one based on the characteristics and capabilities of digital technology rather than on the strengths and limitations of analog technology.

So you may well wonder what I am doing here today, since another casualty in an environment of transforming change—that is, change so radical that it alters the basic performance of daily activities—is the so-called "wisdom" of the elder statesperson. I am a firm believer in moving over and letting the younger generation take over. These are the challenges of your generation, not mine. One of the luxuries of being superannuated is the opportunity to observe and comment without the responsibility of making it happen. So today I offer no solutions—no formulas for what skills to

1. Linda Schele and Mary Ellen Miller, *The Blood of Kings: Dynasty and Ritual in Maya Art* (Fort Worth: Kimball Art Museum, 1986).
2. Ibid., 33.

hone, what educational programs to offer, or what constitutes a reasonable career path to pursue. Or even whether the terminology of "professional librarian" will—or should—be meaningful in years to come. I want to raise uncomfortable and controversial questions to stimulate your thinking. I do this not because I wish to alienate, lecture, or equivocate, but because the endemic uncertainty bred by technological advance is your generation's legacy and challenge. Like the frenzied Y2K problem of the twentieth century, its seeds of potential disaster were planted in the past, and the challenge is not going to go away.

I often hear the complaint, "You're talking about management, not librarianship." I think those two concepts are inseparable. Librarianship at every level involves management of something—people, budgets, collections, projects, time, etc.; even, as described in a classic article, your boss!

In a 1999 paper, "En Route to Transformation," published by The American Council on Education, the authors note that the purpose of their paper is "to explore transformation in American higher education."[3] They argue that "the challenges of institutional change presented by the new environment are daunting. For institutions to be successful, change must be both *intentional and continuous* (emphasis mine). Colleges and universities undergo change all the time; only some of the change is intentional. Shifting student demand, budget shortfalls, and legislative mandates will produce any number of changes. But an intentional change requires strategies and behaviors that are quite different from those associated with unplanned change."[4]

The preservation challenge illustrates this point: The deterioration of books and electronic media is an unplanned change. The recognition of the potential for deterioration at the outset and planning for longevity represents a judicious, intentional change.

The second challenge is that of continuous change. In today's environment, it is not sufficient to accomplish one or more important changes and stop there. The challenge is to change repeat-

3. Peter Eckel, Barbara Hill, and Madeleine Green, "Enroute to Transformation" (Washington, D.C.: American Council on Education), 1.
4. Ibid., 1.

edly, and to become more responsive to the needs of higher education's many stakeholders and its external environment. In other words, colleges and universities need the ability to assess their environments, to decide whether, when, and how to act, and to change accordingly.[5]

Examples of continuous change (defined by Webster as "stretching on without break or interruption") are online catalog technologies and the development and management of hybrid collections: the ever-changing mix of printed material, databases, electronic journals, and multimedia resources.

Librarians and technology specialists have been struggling with transforming change, as opposed to evolutionary change, for at least a decade—struggling within the resistant cocoons of academic institutions and their faculties, who persistently denigrate those seeking to articulate what lies ahead as radical, wild-eyed "futurists." So it is indeed heartening to welcome finally the assumption by the respected American Council on Education that transformation is inevitable.

What does this growing acceptance of transforming institutional change mean for libraries and librarianship? Doomsday scenarios for the book, the library, and the profession of librarianship continue to absorb an enormous amount of attention and energy. To me, the critical issue is not whether there will be libraries and librarians in the transformed university and society. Certainly the functions we have traditionally performed are fundamental to any knowledge-based institution or endeavor in the twenty-first century, regardless of the format or medium of that knowledge. *I believe the critical issue for the profession is—will we be a part of the transformation process? Or will we cling to our past traditions and perspectives so insistently that we will be unable to imagine and participate in the future?*

Contemporary librarians face a huge plateful of indigestible "critical issues." Today there are many players in the information arena: lawyers, publishers, technology specialists, technology corporations, etc. If we want to be participants in shaping the future of our higher education organizations and our democratic society

5. Peter Eckel, Barbara Hill, and Madeleine Green, "Enroute to Transformation" (Washington, D.C.: American Council on Education), 1.

based on unfettered access to information, I think we must focus on three specific areas to which we bring significant expertise:

• Management of campus information resources: technology, services, and content

• Careers in librarianship—or how do we define the new opportunities for information professionals? Who are they? Where do they come from?

• Educational preparation for information professionals for the twenty-first century

I worry that if we do not become creatively and actively involved in these three enterprises, we will forfeit the initiative to others who do not share our commitment to and our understanding of the importance of our traditional values, and who will destroy those values in the race for immediate profits and Wall Street approval.

As academic institutions transform themselves both intentionally and continuously in order to flourish in a digital society, it is inevitable that the organizational structures of libraries and their host institutions must not only plan for change, but be prepared to continue that process—stretching on without break or interruption. These changes lead to new definitions of the responsibilities for those who provide and manage information resources, a consequence that in turn has critical implications for both career opportunities and the educational preparation for these responsibilities.

As the ACE authors of "En Route to Transformation" point out, these changes will occur both rationally and irrationally; they will be both planned and unplanned, and will respond to as well as influence developments in all areas. It will not be the neat, linear progression we've grown accustomed to in the analog world. Please bear with me as I try to articulate the ever-changing interrelationship of these three areas, and how events in one arena influence the others in an unpredictable, continuous dance.

Two significant insights are key to understanding the transforming capacity of digital technologies:

• Many media and formats, such as paper, CD-ROM, and magne-

tic tape, can be generated from knowledge stored as an electronic signal. This unique capacity has revolutionized our fundamental concepts, practices, and management systems for librarianship—in contrast to how, for centuries, we viewed paper as the medium for creation, storage, dissemination, and use. Because of this capacity to customize, users can and will demand different media and formats in response to a specific intellectual inquiry.

• The capacity to customize knowledge media and formats means that effective management of a hybrid environment of both analog and digital technologies must respond to the characteristics of digital technology, which defy time, space, and disciplinary limitations. It is evident, I think—despite the advent of electronic books—that paper will be with us for a long time.

For years, we have tried to stuff digital technology into our management systems designed for print-on-paper because paper is still very much with us. The end of that era—along with the Y2K issue—is now behind us. We can no longer continue to adapt our familiar organizational structures and management systems for productive use of technology any more than we could pretend that 2000 would automatically follow 1999 in the embedded computer codes. We must rewrite the code!

MANAGEMENT OF CAMPUS INFORMATION RESOURCES:
OR, THE NEW CODE FOR Y2K AND BEYOND

According to F. Scott Fitzgerald, "The test of a first-rate intelligence is the ability to hold two opposed ideas in the mind at the same time, and still retain the ability to function."[6]

A major characteristic of networked digital technology is its simultaneous capacity for widespread decentralization and the imperative for some degree of central coordination essential to ensure broad and unencumbered networked access. Effective leadership in the twenty-first century must manage that creative tension, as we invent the future while holding on to the important values of the past.

6. F. Scott Fitzgerald, *The Crackup* (1936). Cited in James Champy, "The Starfish School of Management," *Forbes* 162, no. 14 (28 December 1998): 81.

Academic librarians today face the challenge of creating new internal organizational mechanisms to deal effectively with the rapidly changing mix of information resources and user demands within outdated institutional organizations noted for their extraordinary resistance to change. These include:

• Departmental budgeting and hegemony despite increasing interdisciplinary instruction and research

• Compartmentalized budgeting for libraries and information technology units, despite increasing overlapping of technology, services, and content

• Institution-bound budgeting and governance despite the increasing global nature of scholarship and information resources

• Territorial governance despite the increasing need to fund global preservation facilities and network capacities

• Rigid adherence to tenure policies which spawn ever more crippling costs for scholarly publications

• Rigid adherence to the advanced scholarly degree and disdain for managerial competence as qualifications for senior positions —president, provost, and dean—in large, complicated institutions with significant financial responsibilities.

Not only must contemporary librarians manage the upheaval within their own bailiwicks, but they must do so within an administrative context either unwilling to change or professionally unprepared to create an environment sympathetic and conducive to rational, planned, intentional change—a change that directly confronts deeply-held emotional attachments to the status quo (more bluntly, the sacred cows of academia). The personal and professional qualities required for success in such an environment are enormous. They are very different from those of the relatively recent past, when the abilities to stay out of sight, keep the boat steady, and be seen but not heard more or less guaranteed career longevity. I believe that it was just such shortsighted pressures from the ethos of the academic community that have resulted in today's dearth of imaginative leadership that is lamented throughout the profession.

I also believe that the shortsighted pressures from the ethos of the librarian community, insisting on rigid adherence to outdated professional credentials, have also contributed to the current lack of creative leadership across the information resources spectrum.

Perhaps one of the most crippling legacies of the past is the belief in a silver bullet:

• A one-size-fits-all formula embodied in outdated guidelines and standards for accreditation, certification, etc.

• An academic library template that dictates how to manage information resources

• Looking to gurus for the answer: "Just tell me what to implement."

Because of the broad flexibility and many options offered by digital technology, the solutions must vary with the mission of the institution. Some current examples include the following:

• Columbia: library and academic computing responsibilities combined under one vice president for Information Services

• Emory University: construction of an addition to the library housing the academic computing division. Activities combined to offer one-stop shopping to users, requiring a mixture of direct and multiple reporting relationships

• Stanford University: academic information technology combined with library responsibilities

• Lehigh University: libraries and computing activities combined under a vice provost for Information Resources

In similar fashion, those institutions choosing to develop extensive distance education programs will design organizational structures different from those for institutions choosing to offer primarily residential educational programs.

No matter what the organizational structure, the overriding concern is to find individuals with the skills to conceive and implement such challenging operations. Where will they come from?

What will they be called? Librarians? Chief information officers? Scholars? Information professionals? Does it matter? What's in a name? Is our search for talent hindered by the constraints of terminology, and all the baggage that carries?

The leadership for this vastly expanded responsibility has not conspicuously emerged from the traditional processes of professional librarianship because, I believe, we have failed to develop the necessary breadth and depth of creativity and analysis to embrace a future very different from our past. We have been reluctant to recast our traditional notion of the "library profession" both in theory and practice and to actively recruit individuals with different talents, skills, and academic credentials under a new umbrella—a flexible and continually changing definition of "information resources management" based on a solid core of principles, rather than a body of practices. In the same manner, individuals coming from the technology side of the house flee from any association with the term "librarian." They unfortunately, and seemingly willfully, remain largely ignorant of the considerable expertise of librarians for the organization of knowledge and systems of access. Nor have they developed a fundamental appreciation and knowledge of scholarly information habits and requirements. The scholars, who hold these latter talents in abundance, tend to disdain the need for strong managerial skills and experience.

It seems to me that the responsibility to "rewrite the code" for the millennium lies with the library profession. If we do not accept that responsibility—to recast our bureaucracies, to rethink our educational curricula, to broaden our basic philosophies, and to jettison the rigidities of the past—we could quite possibly become as superfluous as the technological gurus predict.

Some elements of the "new management code" are:

• Managing random, intentional, and continuous change

• Mediating a shifting range of choices in support of the institutional mission

• Preserving the past, serving the present, and creating the future all at the same time

In *Management's New Paradigms*, Peter Drucker observes:

> By now, however, it should have become clear that there is no such thing as the one right organization. There are only organizations, each of which has distinct strengths, distinct limitations and specific applications. It has become clear that organization is not an absolute. It is a tool for making people productive in working together. As such, a given organizational structure fits certain tasks in certain conditions and at certain times. For example, one hears a great deal today about the end of hierarchy. This is blatant nonsense. In any institution there has to be a final authority, that is, a "boss"—someone who can make the final decision and who then can expect to be obeyed in a situation of common peril—and every institution is likely to encounter it sooner or later. . . . Hierarchy, and the unquestioning acceptance of it by everyone in the organization, is the only hope in a crisis. But what is the right organization to handle crisis is not the right organization for all tasks. Sometimes the team approach is the right answer.[7]

The important message here is that we will have to adjust to working in a variety of simultaneous, coexisting, and continually shifting organizational structures. That is not an easy task.

CAREERS IN LIBRARIANSHIP

Preservation of knowledge and provision of access to that knowledge have been the unique and historic missions of the library profession. Our concepts of the organizational structures, management skills, disciplinary knowledge, and bibliographic tools necessary to carry out that dual mission have all been based on the static characteristics of print-on-paper as the primary medium for storage and dissemination. The very stasis of print-on-paper technology readily lent itself to command-and-control, compartmentalized, semi-autonomous organizational structures within a host institution. Before the advent of digital technology and the disso-

7. Peter Drucker, "Management's New Paradigms," *Forbes* 162, no. 7 (5 October 1998): 158.

lution of our familiar barriers, we could be—and generally were—a law unto ourselves, too often looking inward, making our own rules, and assuming a caveat emptor attitude toward our users. The stifling nature of library bureaucracies has been a persistent complaint from both library educators and bright, energetic, creative, young graduates. Digital technology changed all that—introducing two important changes:

• The imperative to customize information resources—technology, services, and content—to fit user demand and, perhaps more importantly,

• The powerful threat of emerging alternative information sources and services.

If our historic mission is still fundamental to the goals of higher education—and I strongly believe that it is—what are the career implications for those who will perform these functions in the future? How will we define the needed skills and career opportunities? How will we transform our rigid organizations to attract and nurture the leaders of the future?

More than twenty years ago, Warren J. Haas, former Columbia University librarian and retired president of the Council on Library Resources, urged us to consider librarianship as an aggregate of professions. Today, the choices and opportunities—generated by random, planned, and continuous change—are greater than ever, and continue to multiply. The core issue is, of course, how do we define professional librarian? By the skills? By the traditional graduate credential? By the fact of working in a library but with new talents and skills? What functions are "professional?" What functions are paraprofessional? Are the terms even useful any more? If the unfortunately simplistic "I like books," which long ago replaced "library hand" as the defining characteristic, is no longer useful, what is? "I like computers"? I think not.

I believe that the traditional mission of librarianship—the organization of, preservation of, and access to knowledge, regardless of format or medium—will remain central to the higher education enterprise. I propose three primary strengths that today's librarians

must develop to play a major role in shaping the future, even though that role may mean a totally new terminology and definition of "profession": proficiency, policy, and preservation.

Proficiency

A body of skills, which changed little over decades, has always defined librarianship. Emphasis was too often placed on the mastery of specific skills rather than a broader understanding of the philosophy and purposes underlying those skills. Thus, we became catalogers, reference librarians, or bibliographers. Our role in a democratic society and higher education was established and revered. (Testimonials abound from successful individuals who credit their achievements to early library access and a sympathetic librarian.) Thus we became comfortable and "entitled" rather than active and persuasive advocates in an increasingly zero-sum game. Too often, we continued to cling to our traditional skills because we were good at them and failed to perceive their increasing irrelevancy in a changing world.

I would argue that those basic functions are still important, but we must reinterpret their exercise and develop additional proficiencies if we want to control our destiny, rather than simply offer expertise at the functional level. I would further argue that the professional librarian of the future must develop a broad knowledge of the many talents necessary in order to manage information resources and to build a productive organization blending a variety of talents and levels of expertise with diverse educational backgrounds. As paper is no longer the sole medium for scholarly information, the traditional graduate library degree will not necessarily be the sole credential for working in the information resources enterprise. I am not talking about management at the top of a hierarchical structure, but leadership and management at every level in the organization. If organizations are no longer static and bureaucratic, but composed of continually shifting teamwork relationships combined with responsibilities for accountability and ultimate decision-making, every individual must be prepared to manage both human relationships and operational responsibilities. The abilities to learn quickly, to flourish in an ambiguous environment,

and to design and execute creative solutions to new situations will be just as important as proficiency in the more traditional skills of cataloging, reference, and bibliography. Technical expertise alone is no longer sufficient to develop and maintain the new systems for information access and services. There is no safe haven out there any more.

One of the most important new proficiencies is the capability to conceive and manage new methods of collaboration. Well yes (you say), we librarians have been collaborating for years. Perhaps I've lived too long in Washington, but I'm speaking here of a "new collaboration"—a Third Way. During our long history, we have defined a variety of activities as cooperation, coordination, and collaboration, but we've never clearly defined the distinctions. A colleague who has studied this phenomenon in the social work field offers the following definitions:

Cooperation is where we begin to work together informally on a relatively superficial level, such as regional reciprocal access agreements. Coordination is when we look at our services as pieces of the whole, trying to make it all work as a system. A good example is interlibrary loan. Collaboration is creating something that is greater than the sum of its parts, developing common policies and procedures, investing resources toward a defined common goal.[8]

The new Euro currency of the European Union is an outstanding example of the "new collaboration." Each country is giving up a distinctive currency (the mark, the franc, the lira), a currency that has served as a national symbol and territorial hallmark, in recognition that such territoriality is counterproductive in the emerging global economy. The acid test of the "new collaboration" is that participation means passing the point of no return. In all our past activities, control was still retained at the institutional level—dropping out remained an option.

Are we librarians prepared to give up the notion of an "autonomous profession," to adopt a more inclusive terminology, cre-

8. Andrea Youngdahl, *Building and Participating in Collaboratives*. Unpublished draft.

dentialing process, and educational curriculum, in order to lead our institutions into an integrated seamless web of scholarly information resources, regardless of ownership, with productive solutions for sharing funding, decision-making, and resolution of disagreements? Will we go the Euro way—or hang back like the British, clinging to our island mentality?

There is no question that proficiency in information technology will be critical for the twenty-first-century librarian. Again, the issue is how much specialization and where does that career path lead? One of the greatest contributions librarians make is their unique experience in systems for organizing and providing access to knowledge. We have seen too much duplication of effort and redundancy as librarians and technology specialists reinvent the wheel both within the same institution and in external organizations. An understanding of the technical capacities of digital technology must be combined with a thorough grounding in the use of scholarly information by scholars of all disciplines and the willingness to eliminate territorial barriers and cultural biases in order to work productively with other specialists in pursuit of a common goal.

This is not an easy task. Not too long ago, I was assailed at a dinner meeting by a very able mathematician with the usual pronouncements about the death of the book, the fragility of paper, the uselessness of traditional libraries, and on and on and on. Some of his assertions reflected simple bias, some simple ignorance. The response is not to retreat back into the shell, talking only to those who agree with us, but to educate, convince, persuade, advocate, and lead.

There is a greater need for in-depth knowledge of disciplinary specializations: What are the discipline's primary questions? How do they seek and use information? The increased focus on information technology during the past decade has perhaps obscured the basic importance of thorough knowledge of scholarly disciplines: the literature structures in specific fields, changing patterns of research and instruction, the increasingly chaotic nature of disciplinary information resources, and the way different disciplines seek and use information. As librarians, we have always been at the

center of the universe of knowledge, with the best view in the institution of the range of scholarly interest and information habits across the entire spectrum as well as the responsibility for maintaining a delicate balance among the competing interests. That responsibility will continue to be important, but with some significant additions:

- Greater depth of disciplinary knowledge

- A knowledge of electronic resources

- An understanding of new instructional and research methodologies using digital technology

- The ability to plan for and provide hybrid collections blending paper and electronic resources. For careers in this specialization, I believe advanced disciplinary degrees will be even more important, but not necessarily combined with a traditional M.L.S. degree.

The responsibility to develop teaching skills is growing in importance. Librarians have always shared their expertise with library users—sometimes in informal fashion and, during the past several decades, with formal bibliographic instruction programs, as this function was gradually taken over from the teaching faculty. With the advent of networks, a wide range of electronic resources, and constantly changing literature structures, this proficiency is more important than ever. Our information technology colleagues have generally been content with rolling out new hardware and software on the assumption that anyone can use them. The ability to design and teach creative educational programs will become even more important in the future, as we incorporate this function into our responsibilities.

Policy

In an environment of random, planned, and continuous change, the need for policy wonks is critical. Information professionals, regardless of their particular role or place in the organization, are increasingly faced with the need, first, to distinguish policy from

practice and, second, to possess the skills to change unproductive practices by creating new and imaginative policies. This process demands a high level of analytical thinking and creativity, and the ability to set priorities and develop strategies with a wide range of colleagues. For academic librarians, it means active involvement at the highest levels in the institution; for public librarians, active involvement with a broad range of community leaders and decision-makers.

Preservation

I thought preservation of brittle books was a monumental challenge—but it pales in comparison with the responsibility for archiving electronic media. I believe that the archival function—insuring the future accessibility of knowledge—is a primary responsibility of our profession. It is an awesome one because no one else shares our commitment to that fundamental principle. Preservation of electronic media, with all the implications for collaborative funding, shared responsibilities, complex technical considerations, and intellectual property issues, represents a mandatory career path for the library profession. Perhaps one of the most significant new challenges is the need to make preservation decisions, not upon acquisition or at the point of evident deterioration, but at the creation of the knowledge. The National Archives is the primary example of the importance of this change. In the past, they were required by law to preserve and maintain government documents turned over to them by a huge bureaucracy within thirty years of their creation. All their principles and procedures were designed to archive paper documents created in conformance with universally accepted standards. The advent of electronic documents, with wildly varying standards and formats, requires not a tinkering with, but a complete transformation of, their procedures, including the need to work closely with the creators of the documents because of the lack of a universally accepted standard. Needless to say, they have not yet accomplished this transformation.

I believe all these specialized areas—proficiencies, policy, and preservation—will be important for future careers. But these alone

are not enough. The one absolute and integrating requirement is to develop sufficient knowledge and understanding of each area of expertise outside of one's own in order to communicate and work productively with specialties other than one's own.

IMPLICATIONS FOR EDUCATIONAL PROGRAMS

In an environment of continuing change, I think the critical question for educators to ponder is: How do we educate for an uncertain future when we have no clue as to what those circumstances will be? As Peter Drucker has bluntly stated, "[W]e are preaching, teaching and practicing policies that are increasingly at odds with reality and therefore counterproductive." How do we, in the words of the ACE report, give our students the ability to "assess their environments, to decide whether, when and how to act, and to change accordingly"? What are the career goals and conceptions of prospective students? How do these aspirations match with reality? How do we pin down a continually changing reality? What should be the basics of an education for the information professional of the twenty-first century? I applaud the efforts of Syracuse University's School of Information Studies to grapple with these fundamental issues, to re-conceptualize the core curriculum. I hope that their initiative spreads among their colleague institutions. But the information school faculties can't do it alone.

In the past ten years, we have seen a growing movement in former library schools to capitalize on the great demand for information specialists in the corporate sector, where salaries are superior and, quite possibly, institutional respect is greater. I think for many years we have been trapped in an iron triangle in academic libraries —noncompetitive salaries, entrance requirements and curricula that do not correspond to reality, and rigid library organizational structures that suppress creativity and initiative. As a consequence, we are not attracting the best and the brightest at a time when we need them most. We all bear responsibility for this dilemma—as university administrations, library school faculty and administrators, and library administrators.

One step in this direction has been taken by the Council on Li-

brary and Information Resources to address the critical short-term needs. A $1.4 million grant from the Robert W. Woodruff Foundation will establish the Billy E. Frye Digital Leadership Institute in collaboration with Emory University. The Institute has been formed to effect fundamental change in how universities manage their information resources in the new digital era. The Institute will provide continuing education opportunities for individuals who currently hold, or will one day assume, positions that make them responsible for transforming the management of scholarly information in institutions of higher education. Over the next decade, the Institute will train a cadre of some six hundred professionals—most likely to be in mid-career and drawn from library and administrative staffs, computer centers, and faculties—who can preside over this change on the nation's campuses and comprehend its far-reaching implications for the way academic institutions allocate their financial resources and fulfill their educational missions.

This project is for the short term and in no way should be seen as competitive or substitutional. We look to the schools of information studies to reconceive their mission and curricula to establish a vital pipeline of talent for the long term. The enthusiastic endorsement of this project by presidents, provosts, librarians, IT professionals, and faculty attest to the significance of the perceived crisis in leadership for academic information resources.

CONCLUSION

I would like to close with a fervent plea for your energetic and wholehearted involvement in wrestling with the unsettling changes and intransigent issues in the challenge to create a new role for our historic traditions in the twenty-first century. As Brian Lang, former chief executive of the British Library, said in a recent address:

> I firmly believe that libraries are the most important institutions ever created. If the book is the most potent artifact ever invented by humankind, then libraries represent and define humanity. Virtually every new invention, virtu-

ally every new thought, builds on existing knowledge. That is why librarianship is a key profession. Librarians are the gatekeepers for scholarship, for research, for learning and for any sort of real understanding of what the world is about.[9]

9. Brian Lang. "Why the Printed Book Will Survive," *Cosmos Club Bulletin* 52, no. 2 (February 1999): 30.