
Services to Remote Users: Marketing the Library's Role

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ABSTRACT

DISTANCE LEARNING IS AN EMERGING EDUCATIONAL market of compelling interest to higher education. Driven by economics and enabled by innovations in educational technology, this new market presents significant marketing challenges to academic libraries. Libraries should approach support to distance education as a new business opportunity, utilizing techniques of market evaluation and analysis. Close alignment with faculty and administrators, together with meaningful performance measures, can position academic libraries to provide appropriate educational support while improving awareness of the importance of libraries as a competitive advantage in distance education.

INTRODUCTION

As they approach the end of the millennium, colleges and universities are engaged in an extraordinary investment in technological innovation. Educational technology has become an irresistible force on large and small campuses across the land, infiltrating institutions to a degree that rivals the level of corporate investment in information technology over the past decade (Cunningham, Tapsall, & Ryan, 1998, chap. 2).

Educational technology is a compelling investment for higher education for a number of reasons. The marketplace demands computer literate workers, and students must be introduced to computing technology while in school if they are to succeed in the workplace. Faculty can conduct research more easily and collaborate more productively if they

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have access to colleagues and research data via the Internet. And, as has been the case in the corporate world, an institution may well expect lower administrative support costs in a computing-rich environment.

For many academic institutions, the prospect of increased revenue from distance education plays an equal, if not greater, role in this technology investment decision. The revenue streams presently being realized by established continuing education and distance education institutions are significant, and forecasts for growth in this educational arena are consistently optimistic. The Western Governors University, the University of Phoenix, Britain's Open University, and Florida Gulf Coast University are representative of institutions that have already made serious investments in the success of this new form of higher education. Many other colleges and universities can be expected to seek much-needed revenue from distance education (Blumenstyk, 1997a, 1998).

Higher education also needs flexible capacity. After two decades of declining enrollments, the children of baby boomers now threaten to swamp colleges and universities. In another decade, the cycle will go bust again (Western Interstate Commission for Higher Education [WICHE], 1998). The difficult economic climate in which these market swings must be managed is well documented. Rapidly escalating tuition costs have brought market resistance and drawn unwelcome attention from the political arena. Physical expansion is increasingly problematic for many institutions. A declining federal research base must cover a growing number of research-oriented universities. Competition for grants and individual philanthropy is on the rise. These trends combine to place relentless pressure on institutions to find new sources of revenue and new low-cost educational models. Distance education is such a model.

As a practical matter, education at a distance has been available for many years. Correspondence schools, public television, training videos, and satellite download programs are familiar examples of educational opportunities available to those who live and work at a distance from traditional institutions of higher learning. Until recently, such educational alternatives held minimal interest for traditional higher education, and academic libraries had little reason to provide support to the students of these programs. As a result, academic libraries have, by and large, only recently turned their attention to the challenge of supporting this community of learners.

The rapid expansion of educational computing has dramatically altered the prospects for, and interest in, post-secondary distance education. Whether the prospect of distance education is imminent or distant, academic libraries dare not ignore this change. In his classic work on innovation, Peter F. Drucker (1985) describes in detail the transforming role of technological innovation on industries and market structures (chap. 6). Although academic libraries are not accustomed to thinking of

their products and services as an “industry” with “markets,” Drucker’s insights are both enlightening and relevant to contemporary libraries as they seek to define a relevant role within the emerging phenomenon of distance education.

Like most venerable institutions, academic libraries are justifiably proud of their strengths. The current model of academic librarianship has developed over the past 100 years as a sustainable strategy for providing cost-effective information service and products to resident communities of scholars. Yet Drucker provides compelling examples of similarly stable industries that were plunged into crisis by changing markets—almost overnight. The U.S. health care system, long distance telephone service, and mainframe computing are among the industries that went, in less than a decade, from confident secure stability to a scramble for survival.

In describing the ways that seemingly solid enterprises can find themselves suddenly challenged, Drucker (1985) points to the convergence of previously unrelated technologies as one significant driving force for change (pp. 84-85). Information technology, for example, was created from the convergence of telecommunications, desktop computing, and client-server technology, and one need look no farther than the industries of insurance and banking to appreciate the profound transformation wrought by these converging technologies. Just as information technology transformed consumer banking and insurance work (Evans & Wurster, 1997), so too will educational technology transform education.

Rapidly changing environments always provide both opportunity and risk. Technology based instruction is clearly an emerging growth market for higher education, and academic libraries will, of course, develop service models and staffing patterns to meet this new demand. Perhaps the greatest challenge librarians will face is in managing print collections and traditional resources so that they remain high-value assets to students off, as well as on, our campuses. In this endeavor, librarians will be obliged to confront the pervasive belief that everything distance learners need to know is (or soon will be) online. Just as teaching at a distance is a new “product line” for faculty, so too is library service at a distance a new “product line” for libraries. Digital resources are but one medium of many available to libraries to meet the needs of students learning at a distance.

THE MATURING OF HIGHER EDUCATION

Colleges and universities, like the traditional academic libraries they support, can be understood in a business sense as maturing organizations. The life cycle of a successful enterprise generally follows a predictable path to maturity. In the early years of its existence, an organization will struggle to establish a place in the market. Once established and secure, the successful enterprise will grow quickly, often faster than the growth

rate of the population or the economy. Success inevitably draws competition and, as competition enters the market, growth rates flatten. At the end of the life cycle, a mature organization is characterized by significantly slowed growth and greatly increased competition. For obvious reasons, every industry seeks to defer the onset of this unhappy state. Nevertheless, banking, publishing, utilities, and the automotive industry are prime examples of industries that have slid, like higher education, into maturity.

Fortunately, the phenomenon of business maturity has been the subject of intense interest and study for many years, as have strategies for forestalling its onset and restarting growth curves. One proven technique for delaying industry maturity is that of innovation in products and markets. Advances in technology routinely generate new products to serve existing markets and, likewise, new markets can be created by new technology (Porter, 1985, chap. 5).

Sound recording is an example of an industry in which technology has driven growth in both products and markets. The sound recording industry has been remarkably successful at introducing new improved technologies for listening to recorded music. In less than forty years, the industry has moved from monaural records to stereo recording to 8-track tapes to cassette tapes to music videos to CDs. Each technological innovation increased the quality and stability of recorded sound and launched a new wave of purchasing activity by those who enjoy music. New markets were also created by these new technologies and, today, music videos, high-quality sound systems in cars, and portable listening devices are ubiquitous in the marketplace.

Educational technology is viewed by many in higher education as the key innovation that will jump-start dynamic new products and markets in the higher education industry (see Patrikis, 1996; Noam, 1995). Distance education will expand existing markets in continuing education and open significant new markets of older and nontraditional students. The strategic importance of educational technology is unquestioned in many academic sectors, and these sectors are investing heavily in the necessary technological innovation. If technology can create new markets for higher education through distance education, and competitors are entering the market on all sides, few institutions will have the option to ignore the opportunity.

It is worth noting that higher education also expects to upgrade its own internal work efficiencies in the process. In this they are encouraged by their relationships with the business community which, for nearly two decades, has been engaged in a massive investment in business computing. During this period, business computing has absorbed nearly 50 percent of total capital investments in American industry (Schrage, 1997). These expenditures have been based on the theory that investments in

information technology lead to more and better information, which in turn leads to increased productivity and better decisions. Although this interest in providing computing capacity in lieu of staff is a relatively late arrival on academic campuses, it has now been adopted with enthusiasm. Just as companies have had to learn to work with smaller support staffs, so too has higher education.

Academic libraries have worked hard to adapt to this new technology-driven environment. Confident of their value to education, but preoccupied with stunning escalation in materials costs, academic libraries have nevertheless attempted to chart a new course that includes educational technology and support for distance education. Experiments abound, and the literature of library and information science reflects these experiments with a growing number of how-to articles and anecdotes. For the moment, librarians are focused primarily on delivering traditional library services to the distance learning environment. Such products and services as online reference, electronic reserve reading, network-accessible databases, document delivery, and Web-based information competency tutorials are the current focus of support.

The noted author John Diebold (paraphrased in National Research Council, 1994, chap. 2) has described three phases of change that follow the introduction of technological innovation. In the first phase, people do the same work as before but new tools change the way the work is done. In the second phase, the work itself changes as a result of technological innovation. In the third phase, society itself begins to change as a consequence of the innovation. Academic library strategies for supporting distance education are currently at phase one of Diebold's model—i.e., using the power of educational technology to do the same work as before. Librarians have yet to understand how work itself might change.

ACADEMIC LIBRARIES

Libraries have always faced challenges to giving users what they need, even when the user community was contained on a physical campus. Since the establishment of academic libraries as a shared resource, responsible librarians have struggled to achieve the appropriate balance between cost and convenience, security and easy access, preservation and use. In the current decade, constraints on resources have increasingly pitted traditional library products and services against the customer-oriented expectations of contemporary higher education. The saving grace for academic libraries was, until recently, their monopoly position on campus.

The World Wide Web is currently emerging—in the minds of many—as a reasonable competitor to the academic library especially for undergraduate education. The attraction to students is undeniable as is the appeal to cash-strapped administrators. The idea of the Internet as library is a pervasive, if superficial, picture that is fueled by advertising

budgets of which libraries can only dream. In the "library" of the World Wide Web, no facilities are needed and seating is unlimited. Access and search engines are available twenty-four hours a day. Students can find whatever they need whenever they feel like working. Articles will be sold for pennies. Reference works will be accessible for a pittance per view. Chapters of books might cost a little more, but the student can put all these costs on a credit card. Intelligent agents will respond to natural language, retrieving precisely what the student wants and suggesting alternatives he or she has not considered. Resources will be so easy to use that no instruction will be necessary. Faculty will devise new inexpensive forms of scholarly communication, wresting control of disciplines from the old guard and opening intellectual dialogue to both "haves" and "have nots." Electronic storage will be the norm, ending once and forever the need to store print books and journals.

It is difficult to overstate the appeal of this scenario in an age of scarce resources and technological determinism. It appears to shift book and journal costs from overhead to the student himself/herself, it seems to reduce head count and labor costs, it provides equal access to information resources from any location—on campus or off. More importantly, it offers the cost-swapping so important to justifying massive investments in all those new technologies whose need is unquestioned but whose value is not yet obvious.

In real life, of course, nothing is ever quite so simple. Popular culture, current news, vanity publishing, and hobbies dominate the free resources on the Web. Much of what was once free is now for sale, or experimentally subsidized by advertising, or time delayed to protect value. On the Internet, as in print, high-value content derives from well-established creation and production systems, no matter the medium or delivery channel. The Web complements academic libraries and makes available the much needed material of current news and popular culture, but the primary material of academic libraries, and the educational and research programs they support, is neither free nor yet readily available on the Internet. Intellectual property is still property, and those who own or control valuable intellectual content expect compensation in the medium of the Web as they do in any other.

Just as there are strengths and weaknesses for print media, so too are there possibilities and liabilities in relying on digital information to support education and research. The fact of the matter is, academic libraries provide an important and valuable array of services to their communities beyond that which can be retrieved online. Perhaps it is a symptom of libraries' former monopoly position that these institutional contributions are no longer highly visible or routinely touted. Some of these services have been taken for granted for so long that they have become nearly invisible.

Since 1975, Theodore Levitt (1975), marketing guru of the Harvard Business School, has urged organizations to have a properly defined, thoughtfully articulated, business purpose. The chief reason why enterprises stagnate, Levitt believes, is because of a failure to develop a sustaining reason to exist. Railroads stopped growing because they decided they were in the railroad business rather than in the transportation business. The film industry nearly folded, escaping decline only when it decided it was in the entertainment business rather than in the movie business.

Avoiding stagnation is no easy task, particularly for organizations—like academic libraries—that have been successful over a long period of time. Levitt offers a variety of tips for avoiding this unhappy state, two of which are especially relevant for librarians. First, managers must never fall prey to self-deceiving assumptions, the most notorious of which is believing that there is no competitive substitute for an industry's major product. And second, managers must constantly reject the tendency to assume that efficiency in tasks (production counts or activity measures) can ever substitute for a customer-oriented vision. Requirements for success, he believes, include a powerful commitment to succeed, the willingness to push beyond narrow goals to define a broader business purpose, and a compulsion to do the things that will make customers want to do business with you.

What are the sustaining business purposes of academic libraries? And when did librarians stop articulating those purposes? While librarians may buy and catalog books, this is hardly our defining business purpose. In fact, academic librarians make at least five high-value core business contributions to their institutions:

1. Librarians are responsible for managing and leveraging the institutional resources that are devoted to educational and research information support.

Predictability of costs is highly valued in the educational arena. Colleges and universities, unlike many other kinds of businesses, cannot increase sales in the middle of a semester. In carrying out this resource management task, librarians have not only enabled institutions to allocate a fixed budget amount to buying content, they have accepted responsibility for managing student and faculty expectations about the availability of such resources. As a neutral academic department, librarians ensure that information resources will be available to the students and faculty on an equitable basis, regardless of individual or departmental wealth. Resources are leveraged in several ways. By reducing unnecessary duplication, academic libraries deploy the available resources over the broadest possible base. In addition, standard interlibrary loan practices among libraries enable access to other library collections on a no- or low-cost basis that would otherwise not be available.

2. Librarians contribute to the timeliness and quality of scholarship by making it possible to locate and use needed information, wherever it may be.

Librarians have developed techniques and standards for organizing and accessing information. Union catalogs, OPACs, databases, and indexing and abstracting services ensure that everyone in an institution can see what had been published or purchased and find what is needed. Because of standards developed cooperatively across libraries, the organizing principles of one library system or database will apply across all other library systems. In training students to use information resources, libraries impart a lifelong skill. Organizing materials by a variety of access points enables scholars to browse collections by topic or author, providing productivity benefits to the individual and the institution—i.e., if one item is unavailable, another might meet the scholar's need, and the ability to browse supports the serendipity factor—an important element of cognitive discovery.

3. Libraries document advances in the educational and research disciplines of greatest interest to an institution.

Academic libraries provide a freely available, readily accessible, record of individual and group contributions to the advancement of ideas and knowledge. Authors and their institutions are permanently acknowledged for their contributions to disciplines, and this record contributes directly and indirectly to academic careers and institutional success. Promotion and tenure, research funding, and professional opportunities are closely linked to an individual's publication record. Balanced copyright laws, for which librarians have lobbied long and hard, encourage and protect publication while permitting educational fair use. This repository of ideas provides a durable authenticated base upon which subsequent generations of scholars can build as new knowledge/technology opens new possibilities of discovery or insight. The availability of a relevant existing body of knowledge, together with the tools to locate and use that knowledge, contributes immeasurably to academic productivity in both education and research.

4. Academic libraries guarantee the survival of knowledge beyond one generation.

A shared collection is more difficult to destroy than a collection controlled by one individual, and redundancy among geographically disparate locations provides important long-term protections against natural and man-made disasters. A strength of print as a medium (which digital has yet to match) is that it has been a durable, efficient, and easy to manage medium requiring no special equipment to read. By policy, most libraries adhere to standards of patron privacy, allowing the independent pursuit of scholarship without judgment or obstructive cost across disciplines and generations. Knowledge survival ensures that a culture has roots and spares society the cost and effort of recreating techniques and reinventing technology.

5. Academic libraries contribute to the culture of intellectual pursuit.

Libraries provide a locus for research. They are a window on new ideas, a sponsor of lecture series, a host of exhibits and exhibitions. They symbolize the rigor of academic programs and are an enduring manifestation of the benefits to society of education and research.

These business purposes are not constrained by geography nor are they medium-dependent. If these values begin to describe an academic library's basic business purpose, it becomes clear that distance education presents two separate but intertwined challenges. Librarians must determine how to integrate the tremendous advantages of digital information into existing resources and services while simultaneously deciding how best to support the needs of students who are learning at a distance. If librarians can be successful at the first, it will facilitate our success in the second, but they are not the same.

DISTANCE EDUCATION STRATEGIES

For academic libraries, delivering support to distance education is far from seamless. With the possible exception of networked databases, nearly every traditional product and service offered by academic libraries is incompatible with educating at a distance. Distance learners cannot study in the library between classes. They cannot go to the stacks and browse, or access on-campus databases, or reserve a carrel. They cannot visit the reserve book room or check books out. They cannot walk up to the reference desk and ask a question, sign up for a bibliographic instruction program, or photocopy an article. If distance education proves to be the educational and economic bonanza that so many are predicting, how will academic libraries contribute to, and afford, this new educational future?

In considering these challenges, it is important to distinguish between strategy and objectives. Objectives are the desired end result, while strategy describes a plan for getting there. Objectives characterize what a library needs to do, strategy describes how it will be done. Constantinos Markides (1998), of the London School of Business, has been studying established organizations for a number of years, with the goal of understanding how existing firms successfully approach new opportunities. He has concluded that the biggest obstacles to strategic innovation in established organizations are in the organization itself (Markides, 1998). In general, established organizations face four institutional attitudes:

- We are having a good time and doing okay financially. Why should we change?
- Even if we recognize the need to change, what should we change to?
- How do we know we will pick a winner? And what happens if we're wrong?
- How do we get everybody to jump together? How can we manage the transition to the new (or operate in a dual mode)? (p. 33).

These are good questions for libraries confronting distance education. The answers are revealed in the market positions librarians choose. Libraries obviously have a new customer segment in those who are, or will be, learning at a distance. Do libraries want to cede an emerging growth area to other players? Librarians suspect that distance learners' needs for library products and services will be different from those of on-campus students because their educational experience will be physically and pedagogically different. Can libraries be sure that the educational advances created to serve distance learners will not migrate to on-campus education? Educational technology most certainly gives librarians new ways of producing, packaging, and distributing library products and services. Are there techniques and efficiencies that will improve service to the on-campus community?

Markides (1998) offers several strategies for getting past such attitudes, two of which will resonate with academic librarians. First, he says, established organizations must develop techniques to overcome what he calls the "inertia of success" (p. 34). Questioning core business strategies is very difficult when things are going well. As a result, most organizations do not challenge their way of doing business until a crisis hits—at which point survival takes precedent over innovation. To overcome the inertia of success, managers must do two things: (1) carefully and consistently monitor business activities, over time, and be alert for early warning signs that a core strategy may be weakening, and (2) be inventive and create a positive crisis when necessary. They must also use major milestones, important institutional events, or changing programs to introduce new strategies.

The second insight Markides's (1998) research provides is in organizing for implementation (p. 39). Any new strategic innovation will, of necessity, compete with established activities for managerial attention and resources. Managers must make a commitment to support actively the new strategy up to, and including, convincing others of the importance of its success. Managers must then provide the strategy with its own independent institutional resources. Finally, managers need to develop an environment that encourages and supports integration. Cross-functional teams, temporary assignments, targeted recognition, and rewards are among the proven techniques for establishing an organizational context that promotes integration.

Strategies for addressing distance education should also include more of the traditional components of business strategy (Corey, 1992) such as finance, quality, and marketing; each of which must be developed, discussed, and negotiated.

Market Segment Strategy

The most fundamental question for a library entering the distance educational arena is that of market segments. What products will be de-

livered to what customers? Unlike the average for-profit business, an academic library usually has only limited options in choosing what markets will be served. Distance education may offer libraries somewhat more flexibility in those markets in that programs will sometimes be explicitly designed to require minimal library support.

Financial Strategy

How will the library approach the long- and short-term financial requirements of distance education? What services will be included within tuition, and what will incur an additional fee? What level of start-up costs are involved, and who will cover them? What is the impact on database licenses, and how will the extension of services be financed and managed?

Quality Strategy

Will the quality of library services to distant students be at the same level as that provided on campus? How will quality be measured? How will student satisfaction be measured? What staff training is required to achieve desired quality?

Marketing Strategy

Basic elements of marketing strategy include product planning (what product "packages" can be developed), technical assistance (how will students know how to access, download, and migrate through the library's resources), and communications (how will students learn more broadly about the library and its services, and how will they give feedback to the library).

Some distance education will be, in reality, distance training. Self-contained courses will use workbooks (or their equivalent) and competency testing. While an academic library can always create new service models for such educational programs, there will normally be very little reason to devote scarce resources to such a narrowly focused program.

Libraries must have an abiding role, however, in the education of students who are expected to learn traditional values of critical assessment, independent discovery, and rigorous thinking. Whether students are on campus or at a distance, these essential qualities of higher education can only be acquired through exposure to the ideas and insights of others. The challenge for librarians is to find new ways to work with faculty to achieve this end as effectively in off-campus education as they have in on-campus education.

SERVICING MARKET SEGMENTS

Academic librarians have been remarkably successful in developing a highly productive, cost effective, closely aligned service within their educational institutions. Librarians have made it possible for faculty to assume that libraries will solve all library-related teaching problems with

grace and efficiency. And now, just as libraries need their attention, faculty are themselves distracted by the challenges and demands of teaching in a new environment.

If librarians are not accustomed to working in a highly volatile environment, neither are faculty accustomed to working on camera, or negotiating performance royalties, or managing a class discussion in a chat space. Faculty who must deliver educational products to students both on campus and at a distance can be expected (perhaps not unreasonably) to care more about production values, revenue sharing, time management, class control, and re-purposing of intellectual content than about the library and its problems.

The cost efficiencies of traditional academic libraries are imbedded in the historical service model of the on-campus print and physical library. In this model, librarians could effectively service a wide variety of customer segments from a one-size-fits-all facility. For example, a journal subscription served multiple functions—i.e., faculty current awareness; graduate student browsing/trolling; background for undergraduate research papers; monitoring faculty contributions to, and impact in, their disciplines; and long-term and in-depth faculty research interests.

The historical service model also spares traditional libraries responsibility for all their costs of operation. Self-service access to databases and stacks keeps labor costs down. The parent institution was typically responsible for both storage (shelving and buildings) and infrastructure costs (heat, lights, furniture). Much of this model changes in the digitally designed distance education environment.

Distance education requires far greater clarity about market segments (Steinbach & Lupo, 1998). Digital content is licensed for specific constituencies and may not be available to those off campus without additional cost. Digital storage and distribution may be assigned to the library's operating budget, not covered by the institution. When self-service access to the collections is not an option, books must be paged and shipped. Photocopies cannot be made for students without payment of royalties. Time-honored ways of dealing with required and/or reserve reading may cease to work.

Perhaps the greatest challenge academic libraries face in distance education is in the potential loss of "brand identity." When students and faculty must visit the library to find what they need, the value of the library's products and services is immediately obvious. As a result, the library creates an identity that is clearly linked to the quality of the experience and the applicability of the resources to the problem at hand. Through many transactions, and over time, the library patron develops a sense of the quality, relevance, and distinction exhibited by the library. This identity functions much like a product or company brand name (Farquhar, 1989). Once a scholar or student becomes comfortable with the predictable re-

sources and services of a particular library, he or she may never be truly comfortable switching to another “brand.”

Many academic institutions recognize the value of the “brand identity” that resides in a high-quality on-campus library. Any college or university that tours prospective faculty through the library, or brags about its library resources in its promotional material to students, recognizes the brand value concept. These same institutions may not understand the importance of maintaining that identity in the distance education environment, however. Academic librarians, like brand managers in business, must identify ways to carry their competitive advantage into the distance education environment.

One emerging threat to libraries’ brand identity is in the retention of visibility and credit for the services and products they provide to distance learners. Where the physical library world provides constant reinforcement to the relationship between the library and the material and information a patron needs, the virtual library permits a patron to bookmark a site within a library’s electronic collections and never again be reminded of how that product or service is made possible. For Web-based products that are licensed to IP addresses, a student or faculty member may never even know that their library has made the product available in the first place. Even course support may be problematic. Unless a library has created a recognizable “look and feel” that clearly identifies its work, the work may not be attributed to the library.

Libraries must become substantially more sophisticated about packaging, advertising, and promoting their valuable resources. They must work with faculty to develop course support that reflects positively on the faculty, the institution, and the library. There is reason to believe that academic libraries will benefit one another from their collective efforts in this arena. Research into the behavior of brands and brand equity suggests that strong brands in a product category provide reflected benefit to other products in that category by creating market expectations.

THE CHANGING VALUE CHAIN

Another issue academic libraries must confront in distance education revolves around the place of the library in the overall academic value chain. The traditional campus-based value chain in higher education is vertically integrated. Faculty conduct research which informs and advances their teaching and course design. Departments and schools create degree programs around the knowledge, strengths, and interests of their faculty. Libraries both acquire and make accessible the resources that support faculty research, educational programs, and degree requirements of the institution. Students (customers of the value chain) gain a measurable advantage from being on campus in close physical proximity to faculty, academic departments, classes, and the library. The traditional

educational process values self-motivated discovery on the part of students and faculty and assumes that libraries and librarians play an important—and sometimes essential—role in education.

The new emerging value chain in education is significantly different from that of the familiar campus-based model in that it introduces strong horizontal elements. First, institutional resources are being shifted away from traditional campus-based values, such as staff support for faculty or strong local library collections, and into technologies that vastly enhance personal communication and information exchange outside the institution. Faculty are enabled and encouraged to use these technologies to collaborate with colleagues in other organizations. Library collaborations make it possible for faculty to identify and access the resources of a virtual global library. While this shift in resources prepares an institution to provide technology based education at a distance, it also creates unintended consequences. Faculty develop loyalties to their discipline at the expense of their institution. Students taking courses may never develop a sense of identity with, or loyalty to, the institution. Interlibrary borrowing may skyrocket with no apparent increase in the quality or quantity of research.

Second, there is increased institutional interest in the ownership and management of intellectual property created within the institution. Many educational institutions in the United States are currently reviewing their intellectual property policies in anticipation of the day when the line between articles, chapters, lectures, course ware, computer-based models, and other intellectual products of higher education blurs, and all copyrightable works become interchangeable bits—available for reuse and repurposing. The intersection of distance education and information technology drives these conversations and brings special attention to the importance of library participation in intellectual property policy and management. Although existing copyright law does a good job of protecting the interests of education and libraries, these laws and license agreements are not especially helpful to the needs of distance education. Among the intellectual property management possibilities and priorities currently under discussion on campuses are shop-rights for faculty and within home institutions, mutual cooperation in rights assignment, and attention to the fundamental goals of open communication of intellectual advances.

Third, on-campus education has traditionally valued self-motivated intellectual discovery. Libraries' collections, research laboratories, language clubs, study groups, seminars, author series, book groups, and related aspects of campus life enrich and motivate intellectual life in colleges and universities. Some forms of this intellectual life will adapt readily to the information technology environment, but distance education is more apt to emphasize the forms of learning that result from group discussions, where students educate each other from their own experiences. While

libraries can and will strive to meet the course-related needs of students enrolled at a distance, it is less clear how those students' interest in self-motivated discovery will be served, particularly if they lack proximity to appropriate collections.

VALUE-BASED PERFORMANCE

The need to develop meaningful performance measures for distance education support represents yet another issue of importance to academic libraries. Traditional library service measures have focused on resource consumption and collection growth. Data such as total costs, materials expenditures, size of staff, and number of monographs and serials have been, and continue to be, reasonable measures to assess the strength of collections-oriented libraries (Kyrillidou, Rodriguez, & Stubbs, 1997). Unless students being educated at a distance can access collections and staff with the same ease and convenience as on-campus students, however, the metrics are less meaningful to distance education. System up/down time, database relevancy (especially full-text), document delivery response times, telephone support (including toll free calls), online finding aids and coaching tools, and course-specific Web-based services and products may be more meaningful to students learning at a distance than is the number of monographs added to the collections.

Libraries must achieve an understanding with their institutions that enables both to monitor the contributions and costs of this new form of educational support. Most incentive-based programs are intended to encourage faculty experimentation with distance education and manage risk to the institution. Contributions of, and implications for, libraries may be overlooked. Seemingly simple decisions, such as the distribution channels elected, can have major ramifications for libraries. For example, if a continuing education student registers with an entity other than the college or university itself, that student may not be qualified to access licensed library resources. If the entity of registration should be a for-profit organization, fair use exemptions are lost to that program for faculty, students, and the library.

The role of an educator in distance education is different from that of the classroom educator. When classroom teachers characterize their work, they typically describe their students' personalities, the classroom dynamic, and their own performance in front of the class. The new distance educator, on the other hand, has been characterized as being a manager of resources (Tugend, 1997). Lectures are recorded or selected and distributed, textbooks or workbooks assigned, guest video conferences arranged, additional readings pointed to, a chat space managed. These tasks may not be comfortable ones for faculty, and they may not be familiar with the policy, legal, and regulatory implications of their choices.

Librarians, on the other hand, are already highly skilled resource managers. Through education and experience, they understand that the information they manage exists on a continuum between reach (i.e., how many people can use it) and richness (i.e., the size, malleability, and interactivity of the information itself). Librarians have valuable experience to bring to the distance educator, both in content choices and in the ramifications of extending those choices. Distance education students expect reach as well as richness, as disgruntled Florida Gulf Coast University students have pointed out (Blumenstyk, 1997b, p. A23). Publishers expect to be compensated for reach that exceeds copyright law or license agreements (Fisher, 1995). Libraries must initiate conversations on campus regarding the expectations of students and faculty for rich content as well as wide reach and be prepared to discuss alternatives to achieve desired ends. Failure to recognize and negotiate the tradeoffs between reach and richness may ultimately jeopardize the institution's goals.

TWO MYTHS OF DISTANCE EDUCATION

Myth #1: Distance Learners Don't Need On-Campus Services

A significant institutional attraction of distance education relates to the expectation of adding revenue without adding capacity. As with the economics of airlines, the economics of higher education revolve around the need to fill slots. With too few students, the school has excess capacity and loses money. With too many students enrolled, the school has to scramble to add capacity to meet the needs of the over booked. The compelling attraction of distance learners is that administrators assume their needs can be met without adding infrastructure capacity. While doubling the size of the student body on campus would have monumental consequences for the infrastructure, adding the same number of students who never come to campus, or who come to campus when other students are not around, means adding revenue without adding capacity.

Unfortunately for libraries, this assumption is unlikely to apply to their work. To illustrate the dilemma, one can compare the support typically provided to an on-campus course with that which might be expected by an off-campus class.

A representative sample of the support an on-campus course typically might receive from a library includes:

- timely selection and acquisition of materials to support related or supplemental reading by individual participants in the class;
- placement of required reading on reserve for the class;
- obtaining recommended reading suggested by the instructor;
- instruction in the location and use of relevant library print and electronic resources;
- access to course reviews from prior year students;

- copies of prior year exams;
- availability of syllabus and course notes;
- bibliographies and pathfinders on relevant topics.

In addition, if the course requires a research paper, researched oral report, or other out-of-class independent investigation, the library will expect to obtain and organize material with insufficient quality and quantity to support that student research activity.

A comparable off-campus course could receive the following support from the library:

- create a scalable, secure, password-protected Web-based environment into which class-specific materials can be placed;
- acquire technology, train staff;
- as necessary, obtain rights or pay royalties;
- scan required reading into this secure environment;
- mount CD-ROM databases on a network server or convert to Web-based subscriptions;
- work with the instructor to ensure that she/he can use the technology;
- work with the students to ensure that they can use the technology;
- ensure the systematic removal of all copyrighted material from the environment at the end of the class;
- create research instruction guides and Web pages to provide research assistance to students who are unable to receive instruction on campus;
- establish an online reference capacity or office hours for phone assistance to off campus students with research questions;
- create and enforce policies for lending circulating material to students off campus;
- determine who will pay to ship circulating materials to students off campus;
- arrange for document delivery suppliers to provide photocopies of articles (preferably negotiating a discount); and
- re-negotiate contracts with online database vendors to provide legal access for off-campus students as necessary.

This may not be adding seats to the library, but it is hard to argue that it is not adding costs. The institution may choose not to provide library support to distance learners that is comparable to that which is available to on-campus students, but then the programs will not be comparable.

Myth #2: Digital Publishing is Making Libraries Obsolete

The growth of digital media is exciting and impressive (Lesk, 1995). Enabled by open architecture and powered by an astonishing variety of contributors, the World Wide Web is a communications vehicle the likes of which the world has never seen. It seems not unreasonable to think that scholarly communication, and the finding tools of research and

education, should migrate rapidly and eagerly to this new inexpensive communications platform. Why, then, is this migration not happening with all possible speed?

Scholarly communication is a large complex integrated system, as the Andrew W. Mellon Foundation (1997) conference on Scholarly Communication and Technology so well illustrated. Any systems analyst knows that the older and more imbedded a system is the more difficult it is to understand and change. The "Year 2000" problem (computers that will malfunction because they read the year 2000 as the year 1900) is a prime example of the difficulties encountered when one needs to change large complex integrated systems. But not all large complex integrated systems are computer based. Others are political (tax codes), institutional (organizational dynamics), and economic (global supply and demand). Like the Year 2000 problem, the complex system of scholarly communication that provides research and learning support to higher education contains interlocking but distinct layers of activity, each of which has its own motivations and economics. The parties interested in this system are authors (scholars and researchers), publishers, institutions of higher education, and libraries.

Authors are far from unanimous in their support of digital publishing. An author's perspective begins with the central importance of being favorably judged and positively recognized through the editorial peer review process. Authors want to be published in familiar predictable sources because they expect their work to contribute to the success of their careers, to be readily available to their colleagues and students, and to be maintained for posterity.

Publishers, likewise, are not unanimously in favor of digital publishing. A publisher's primary interest is in the market impact and financial viability of its publications. The economics of publishing encourage publishers to focus on generating sales and/or advertising revenue that are sufficient to cover their revenue expectations. In a competitive environment, a publisher must have a clear market strategy for digital publishing to justify the additional costs of operating in a dual environment.

Higher education has two interests in scholarly publishing. It expects the scholarly publishing system to disseminate advances in knowledge for the benefit of society at large, and it relies on the scholarly publishing system for peer review of faculty-authored works. Post-secondary education has historically retained no rights to the content of scholarly publishing, yet it pays (directly and indirectly) for much of the output. Higher education has reason to expect that scholarly publishing therefore, should provide affordable digital alternatives, and it is not interested in assuming the financial burden of poorly conceived or badly managed digital publishing ventures.

The driving interests for libraries in the publishing system are that it

should be affordable (especially in year-to-year growth rates), predictable (to achieve economies of scale in handling), environmentally stable (for low preservation costs), and durable (the same information can be used many times without changing). In addition, the intellectual property rights that protect the intellectual creations of authors should not unfairly penalize the shared-use model (especially for older materials), nor should it place libraries or their institutions at risk because of the behavior of those who use libraries. Once purchased, the content should become the permanent property of the library, and it should be able to be used indefinitely, by an unlimited number of individuals, for scholarship and research.

With these perspectives in view, one sees why the migration to the all-digital library has not occurred. Faculty are disinclined to publish in untested, possibly impermanent, digital publications. Publishers are focused on economics and impact and disinclined to risk the loss of reputation, revenue, or market share. Libraries are concerned about permanence, fair use, and the total institutional cost of digital formats. Academic institutions may wish to seize on the digital format as an answer to the spiraling costs of scholarly publishing, but it is clear that issues beyond simple format must be addressed and resolved before digital can fulfill its promise.

CONCLUSION

Distance education is driven by economic and market needs of higher education and enabled by innovations in educational technology. Educational technology is expected to generate new markets in continuing education and to spark an interest in higher education from nontraditional students. Major high-visibility investments have been, and are being, made in distance education, ratcheting up the pressure to succeed.

Support to distance education is a new product line for academic libraries. While distance education offers exciting new service and product opportunities, libraries should approach the opportunity as a business might approach a new business opportunity, utilizing techniques of market evaluation and analysis.

Academic libraries will need to recognize that they do not hold a monopoly position in distance education as they do in the campus environment. Reaffirming their core business purposes will help them stay focused, and borrowing marketing strategies from business will help them plan for, and introduce, new products and services. Distance learners will require support from on-campus libraries and librarians, and it will be important to work closely with faculty and administrators to design, fund, and provide services.

Distance education changes the traditional value chain of higher education. Institutional resources are shifted away from established campus-based values. Institutional interest in the ownership and management of intellectual property is heightened. Self-motivated discovery-based learning

may be displaced by learning through shared experiences in group discussions. Academic libraries must develop meaningful performance measures that document the costs and contributions of libraries in this new environment.

Finally, the all-digital library is substantially more problematic than originally anticipated, and the Internet is not a reasonable substitute for high-quality library support to distance learners. Institutions that take advantage of the resource management skills and experience of librarians will have an undeniable competitive advantage in satisfying the needs and interests of their distance education students.

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Services to Remote Users: Marketing the Library's Role. Article. Jun 1998.Â Interlibrary Loan is an important medical library service, especially in libraries supporting patient care. Even in the digital age and the immediate availability of online medical journals, evidence-based reference databases, and e-textbooks, the National Network of the Libraries of Medicine and the National Library of Medicine's DOCLINE service enable critical evidence for practice not [Show full abstract] available locally to be obtained at the time of need. This article explains the reasons behind the author's interest and experiences in Interlibrary Loan services and what mo Services to Remote Users: Marketing the Library's Role. ANNWOLPERT. ABSTRACT.Â EARNING IS AN EMERGING EDUCATIONAL market of compelling inter-est to higher education. Driven by economics and enabled by innovations in educational technology, this new market presents significant market-ing challenges to academic libraries. Libraries should approach support to distance education as a new business opportunity, utilizing techniques of market evaluation and analysis. Close alignment with faculty and ad-ministrators, together with meaningful performance measures, can posi-tion academic libraries to provide appropriate educational support while improving awareness of the importan Services to Remote Users: Marketing the Library's Role. Article. Jun 1998.Â Even though many of the tactics of product marketing (e.g., advertising) require only minor adaptation to be applied to services, the role of interpersonal relationships distinguishes service and product marketing in strategic vision and organizational considerations. This article explores some of the trends in service marketing as they relate to strategic vision, operational and organizational changes, and marketing tactics. In terms of strategic vision, examples are provided of companies that have successfully redefined their businesses as broader systems of services built on competitive cor