

Programming New Learning Spaces: The Changing Nature of Academic Library Buildings^{*}

Yeni Öğrenme Mekânları Programlama: Akademik Kütüphane Binalarının Değişen Doğası

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Abstract: *Greater attention to student and faculty expectations and the impact of technology on library and information operations are combining to significantly alter library physical facilities and programming. Academic institutions undertaking new library construction or renovating older buildings are rethinking how library space is used and configured. Alliances and partnerships among a variety of academic and support units are resulting in facilities more responsive to users' work habits and their preferences for comfortable, inviting, and productive environments. This paper reports on a study of new library and learning spaces conducted for a major American university planning a campus in the Middle East.*

Keywords: *Library buildings, academic collaboration, academic partnerships, new libraries, renovated libraries, Library 2.0*

Öz: *Öğrenci ve öğretim üyelerinin beklentilerine daha fazla dikkat gösterilmesi ve teknolojinin kütüphane ve bilgi işlemleri üzerindeki etkisi bir araya gelerek kütüphanelerin fiziksel kolaylıklarını ve programlamayı önemli ölçüde değiştirmektedir. Yeni kütüphane inşa eden ya da eski binaları yenileyen akademik kurumlar kütüphane mekânının nasıl kullanıldığını ve yerleşimini yeniden düşünüyorlar. Çeşitli akademik birimler ile destek birimleri arasındaki birliktelikler ve ortaklıklar kullanıcıların çalışma alışkanlıklarına ve rahat, davetkâr ve üretken çevrelerle ilgili tercihlerine daha duyarlı binaların inşa edilmesiyle sonuçlanmaktadır. Bu bildiride Ortadoğu'da bir yerleşke planlayan büyük bir Amerikan üniversitesi için gerçekleştirilen yeni kütüphane ve öğrenim mekânları çalışması rapor edilmektedir.*

Anahtar sözcükler: *Kütüphane binaları, akademik işbirliği, akademik ortaklıklar, yeni kütüphaneler, yenilenmiş kütüphaneler, Kütüphane 2.0*

Background and Methodology

In the winter of 2008, at the request of a major private American university undertaking establishment of a campus in the Middle East, a concept paper was developed to guide planning of a new library, and in particular its physical spaces. The investigation placed emphasis upon identification of programs and services that might be included in, or adjacent to, the library facility, whether or not these ultimately were to be incorporated into the library's administrative structure. In preparing the report the consultants conducted physical library and internet research; reviewed planning documents of the parent university and of peer institutions; interviewed individuals with experience in creating new library programs, planning new library structures, or renovating older facilities; and generally assessed issues of space, staffing, and culture. Extensive examination of the websites of universities established in the past decade and a half in the United States and in the Middle East was undertaken. In addition, library programs at a number of liberal arts institutions and research universities were considered, especially those that had undergone construction and renovation in recent years. Readings included literature on the changing nature of student study, new developments in faculty teaching and research, learning spaces, campus collaborative endeavors, and innovative information technology implementation in library

^{*} This paper is based upon an investigation conducted on behalf of New York University in 2008 as it undertook planning of a new campus in Abu Dhabi, capital of the United Arab Emirates. Financial and other support of NYU and its Bobst Library staff in the research and preparation of that 2008 report is gratefully acknowledged.

settings. Visits were made to gather additional data from libraries that recently engaged in construction/renovation projects and information was obtained through telephone conversations or e-mail communications with individuals knowledgeable about new libraries, or about new approaches to library service. What follows is a summary of the study's findings.

Findings and Discussion

Academic institutions are making significant changes in their library programming, changes enabled by technological developments but driven by desire to better meet the learning, teaching, and research requirements of their clientele. These changes result in new physical facilities or renovations to create environments more conducive to the ways the current generation of students learn and live, and to how faculty best teach and do research. Programming is being implemented to complement the new spaces and structures, very often developed in a collaborative fashion with other campus organizations. The alliances forged most frequently have been with information technology partners, but more and more libraries are directly associating their programs with student and faculty support entities and food service operations in an attempt to reach out to more broadly-based constituencies and to break down what are viewed by some as artificial administrative barriers.

Space Planning for Libraries

Previously an estimation of overall space requirements for a new academic library would first take into account the number of book and serial volumes that would have to be accommodated in the facility being planned. With a standardized formula calculating square footage based on expected volume count, certain percentages of that space allocation would be used to determine user and service area sizing and then the anticipated numbers of different types of staff would drive final footage for back office or work areas.

In an era when significant access to information in electronic formats makes it possible to provide an effective library program without having to invest heavily in print resources, space planning for libraries becomes more complex. Using older academic planning tools with smaller physical collections results in less space for library users and smaller areas in which to serve them. As importantly, standard formulas have not caught up with the range of programs and services being incorporated into modern library facilities, nor do they take into account other campus units and operations that have begun to carry out many of their activities in the library building.

Students seek comfort and convenience in their library experience. They want the library to be a place to retreat to, a sanctuary where they can work free from the distractions of home or dormitory, but also a setting in which they can engage in group study and collaborate on project assignments. They want the facility available at most hours of the day or night; they want a place in which they can eat, socialize, rest and relax, and yet one whose atmosphere is conducive to serious scholarship. When they seek learning or research assistance, they do not understand boundaries created by organizational structures and as much as possible want to be able to go to one place for most of their service needs.

Today's students reside in a virtual world as much as in the "real" one (C. Stuart, personal communication, March 5, 2008), and given the technologies they have access to, they see little limitation imposed by walls. They also take a collaborative approach to learning, well beyond anything exhibited by previous generations. This is the result of pedagogical shifts and demands in the workplace requiring teams and partnerships, but also because students like functioning in this fashion. They are at home in large rooms with lots of people, but they desire smaller settings and quieter places too. Students also are seeking opportunities to establish relationships with their instructors outside of the traditional classroom setting. The new library is a primary place where less formal interaction between students and faculty can occur.

With faculty, expectations of the library are more complex. Their views are being affected by educational and societal changes. For many faculty members the library exists only on computer screens when they are pursuing their research, and most are highly positive about that online presence. But many also see the library as a social and professional arena where teaching can take place and where important collaboration can go on. The centralized libraries of today have been compared to the discipline-based departmental or college libraries of old, where faculty could relax, connect with colleagues, pursue collaborations, and peruse the journal literature (B. Miller, personal communication, February 26, 2008). Faculty are finding in modern day library settings a social ambiance and interaction that is valuable and attractive. And this is taking place even as the primary purpose for visiting a library facility in the past—searching its scholarly information holdings—has been made less necessary by technology. The library is seen as a natural place for cross-disciplinary connections and conversations to occur.

Student fluency in a range of learned skills, with words, images, music, etc. in information gathering and in presentation techniques, is important. Libraries, through partnerships with faculty, information technologists, and student services professionals, and by offering equipment and settings to facilitate acquisition of these skills, contribute to well-rounded educations and to life-long learning abilities. Teaching students how to approach a research topic, how to find resources relevant to a need, how to assess reliability and currency of what is found, and how to appropriately attribute sources is now a hallmark of academic librarianship. Increasingly, being able to effectively convey one's work in written formats, or through sound and images, is demonstration of educational achievement.

The Changing Face of Academic Libraries

In the interest of better assistance for students, some libraries are consolidating desks where in the past different types of services were offered. Most often this takes the form of integrating circulation and reference services, but it now is not uncommon to find a greater variety of first-level staff at the same place lending books and laptops, answering directional questions or referring substantive inquiries, and otherwise handling very effectively much of the normal traffic that most service points in a traditional library encounter. Some libraries have eliminated reference desks or at least have reassigned the librarians who staffed them. Electronic inquiries do not require a public desk and librarians increasingly carry out this work in classrooms, in academic departments, or online.

Most academic libraries today are investing heavily in digital reference tools and in robust collections of electronic journals. Some have decided to subscribe to only a bare minimum of print periodicals. The University of California at Merced library, with broad access to the resources of the University of California system and the California Digital Library, spends only about a thousand dollars a year on a hundred or so hard copy magazines, popular titles chosen by the students and minimally managed (few records are kept for them and when tattered or torn they are simply discarded) (B. Miller, personal communication, February 26, 2008).

Round the clock operations during much of the school week at libraries of larger universities, and at many smaller institutions as well, is a student expectation. And as more campus services are provided in the library facility, there will be greater demand for extended hours.

A collection of materials typically found in libraries supporting elementary and secondary educational programs, or in the education departments themselves, are curriculum-based resources relating to primary- and secondary-level teaching. Encompassing textbooks, children's books, lesson plans, teaching tools, equipment for constructing classroom aids, and all manner of material useful for teacher training and professional development, these curriculum resource centers are essential adjuncts to strong programs in education. Given significant interest in elementary and secondary school reform, such centers could be most important in training teachers and in furthering professional development.

Among the services and facilities increasingly being found in libraries are those having a technological focus, particularly where assistance to students and faculty is involved, and those providing food and refreshment.

Student computing laboratories, once almost exclusively the domain of campus information technology units, and physically found in either consolidated computer services facilities or scattered about in academic departments, now are commonly situated in library buildings, usually through some sort of public services partnership between information technology personnel and library staff. This development began at least twenty-five years ago as the value of locating a high-use and staff-intensive operation in an existing extended-hours, service-oriented program became obvious. Today one would be hard pressed to find a respectable academic library without some type of computing laboratory on its premises.

Space given over to workstations that provide access to the full range of information resources either owned by a library or available through its gateway are now found everywhere under the term "commons," as in "Information Commons," or "Learning Commons." At times the word "collaboratory" is used. Where traditional computer labs largely have been seen as places for production of products—term papers written using word processing software and presentations for class assignments—or for manipulation and analysis of data through spreadsheet or statistical packages, "commons" and "collaboratories" are meant to suggest places one goes to gather information and to work together. In their best forms these service areas offer both technical and informational assistance in an integrated and user-friendly fashion. An example is at the Georgia Institute of Technology (2010) Library.

Smaller study rooms have been fixtures in academic libraries for many decades. They always have been popular venues for groups and those carrying out team assignments. What has changed in recent years is the need for such rooms to be outfitted at a minimum with network and power outlets and preferably with display screens to which laptops can be

connected. These rooms range in size from seating for two to four individuals to as many as a dozen or so. The North Carolina State University (2010) Library offers such.

Another type of room in new or renovated library facilities, one requiring fairly sophisticated technological components, is intended for practice of presentations using multi-media resources. These presentations might be by groups or individuals, for a class exercise, or even for a job interview. They usually require a degree of technology greater than that found in the outfitted group studies described above. Some examples of these rooms are found in the libraries at Portland State University (2010) and at Mississippi State University (2010).

As previously noted, information literacy (also referred to as fluency or competency) is considered an essential attribute of an educated person and academic libraries have embraced a leading role in teaching students how to go about accessing and assessing scholarly resources. In doing so librarians require classrooms and training facilities equipped to demonstrate online information sources and to give students hands-on practice in finding material. Such facilities have been added to most libraries over the past decade.

As universities recognize the need to make available new teaching settings and experiment with “smart” classrooms, libraries are natural, relatively neutral places to locate them and to assure they get maximum use and receive necessary maintenance. While these classrooms can be installed anywhere on campus, placement in the library building would seem to be a cost effective approach to implementing these facilities. The University of Oregon (2010) Libraries offer such classrooms.

Multi-media or digital media production labs have found their way into modern libraries as well. Much academic work today—student projects, development of faculty teaching tools, content compilation, analysis and annotation, and other digital scholarship—requires conversion of materials from one format to another, or a mixing of media in sometimes sophisticated ways. Computing, scanning, editing, copying,

and printing equipment, for sound and images—both still and moving—and attendant software, are necessary components of such labs. The North Carolina State University (2010) Libraries have such a lab.

The technological programming of many of today’s libraries described above is in addition to workstations that might be clustered about the various rooms and floors to enable distributed information access. The extent to which workstations may need to be provided depends upon whether students are likely to have their own laptops (or be required to have them).

Just about every library renovation today includes some sort of coffee shop or refreshment area in a prominent place in the facility. Many attribute this phenomenon to the popularity of food and drink operations in large book and music chain stores. If these commercial entities are experiencing success in attracting new customers by selling lattes near the book stock, the reasoning goes, why not do something similar in libraries. Whatever the origin or reason, it is indisputable that the long-held tradition of no eating and drinking in the library facility is dead. Increasingly libraries at academic institutions offer refreshment stations of some kind. The Harvard University (2010) Lamont Library Café is one of many such examples.

Academic Services Traditionally not Located in a Library

The programs and services outlined in the preceding paragraphs, while by no means available in every academic library, are found in many, and especially in those that have had opportunity to reconfigure and renew their facilities. But other student services have begun to appear too, not as often as those that are technology centric, nor as popular as coffee shops, but finding a presence nonetheless. The reason is an understanding of a mutual orientation toward student service and recognition that one-stop shopping, or at least provision of access to many campus activities in or near one building, can enhance the student experience.

Among student services types of programs located in or proximate to some libraries are academic advising, bookstore operations, bridging programs, career services, counseling, language learning, publishing, and writing centers.

Advising offices are sometimes co-located with the library or advising outposts are established there. The Wayne State University (2010) academic advising center is located in its undergraduate library.

Bookstores are seen by some to be natural neighbors for libraries. The University of California, Merced (2010) bookstore is in the library building.

At universities that do most of their teaching in English, but who have students whose primary language is something else, readiness or remedial language instruction is usually essential. A helpful service and a good match for location in the library building is a language resource center. For an institution with a language preparatory program, graded language readers and audiovisual language learning tools are appropriately provided through the library. Laboratories for native English speakers studying foreign languages also have found their way into some libraries. The Harvard University (2010) Lamont Library offers this type of resource center.

With collections of background material on potential employers of a university's graduates, and books and articles on application and resume preparation and interviewing, career counseling centers have found comfortable homes in libraries. The availability of meeting rooms that can be used for interview sessions also is a positive aspect of such a location. The Florida State University (2010) Library houses a career center and offers virtual connections to materials in-house and beyond.

Physical placement of psychological counseling services on campus can be a delicate matter. These programs aim to assure their clients anonymity and often attempt to have office locations that shield student entrances and exits. While one cannot say that library locations are common for this type of service, there are examples of collaborative programming that bring counseling workshops into the library facility (Georgia Institute of Technology, 2010). Georgia Tech is said to have experienced a four-fold increase in counseling center workshop participation after they were offered in the library. Students reportedly perceived the counseling facility as a "sick" place, whereas the library was seen as "normal" and "healthy" (R. Meyer, personal communication, February 26, 2008). The University of North Carolina at Charlotte (2010) counseling center has a long history of co-location with the library.

Administrative linkages between libraries and university presses are well established at some institutions. For example, Wayne State University has merged library and university press reporting.

Finally, helping students improve their writing skills can be considered a "library-like" activity. Writing centers are a natural fit with libraries, often linked to an information commons. Some institutions hold writing workshops or have writing staff in the library at certain hours, even when the actual center is housed elsewhere. For example, the Arizona State University (2010) Hayden Library provides space for use by writing center staff a few hours each week. A good example of a library-based writing center is at Colorado College (2010).

Other Academic Services

Beyond direct service to students, there are three other programs whose relationship with libraries should be mentioned. One of these, collecting, preserving, and maintaining university archives is regularly administrated as a library function.

While less often within the purview of libraries, management of the many day-to-day records generated by the various campus departments and units is an important function that should be thought about in a broader administrative context.

Centers created to assist faculty and graduate students with their teaching, to facilitate student learning, and even to promote research and scholarship have been located in a number of libraries, though their reporting lines usually have been elsewhere. With the influx into the library of technologies intended to help faculty with teaching, research, and scholarship, these pedagogical and faculty support operations have some common cause with library programs. The Boston College University (2010) Libraries, through the Connors Family Learning Center, promote faculty and graduate student teaching effectiveness and undergraduate learning.

Designing and Renovating New Learning Spaces

In anticipation of a project to reconfigure its library space, Washington and Lee University (2006) conducted a study of library renovations and additions around the United States. The libraries examined ranged from those at liberal arts colleges and small universities to research institutions. The survey identified a number of commonalities across the construction projects.

The Washington and Lee findings echo those of others involved in recent library reconstruction. In interviews, on web sites, and in the literature again and again one encounters the words "flexibility," "adaptability," "comfort," "usability," and "variation." The importance of having inviting spaces that one wants to occupy is evident. To assure maximum ability to change layout and use, there should be a minimal number of fixed walls. Where feasible, soft walls—for example, made of fabric—(C. Stuart, personal communication, March 5, 2008) might be used. Classrooms can be designed so that they function in many modes, for larger group use, but changeable into areas for breakout sessions. Having furniture that is easily moveable is important. Library users should be permitted to configure their seating in ways

useful and comfortable to them; chairs, couches, tables, and other furnishings can periodically be returned to original positions, but users should not be restricted in how they function in their work and study environment, so long as they are respectful of others. Where furniture might need to be fixed to the floor for purposes of equipment location or data or power availability, oversized surfaces ought to be provided to enable use of contiguous space by more than one person and to permit spreading out of materials. As much as possible flexible lighting and power grids are being recommended, with the display areas of large department stores, such as IKEA, seen as examples (R. Meyer, personal communication, February 26, 2008).

Libraries are rediscovering inter-shelving of books and other media, a practice experimented with in the 1970's but not widely adopted then due to complexities of equipment provision and maintenance. Monographs and bound print volumes of all types, can be housed on the same shelves as CD's, DVD's, and other computer retrievable information storage devices, rather than having collections separately stored by format. Of course, streaming of digital content soon may make obsolete many of these storage technologies. Radio Frequency Identification capability is making easier the tasks of stack maintenance, circulation of materials, and statistical compilation.

"Each person [has] a slightly different description of the ideal workspace, ranging from a desire for total quiet and privacy to a need for the buzz of a social space..." To accommodate different desires at different times, "varied reading rooms" are suggested in *Ideas and Inspirations*, a consideration of 21st century library possibilities by New York University's Bobst Library (2006), "...a variety of public work spaces...[could affect] a range of scholars that reflect a diversity of working styles." "The library could serve...disparate needs by establishing 'zones,' each one representing a different style and specific type of expected behavior," This is precisely what the University of California, Merced has done. Floors and areas were planned as a series of different "affects," depending upon the type of activity likely to occur in a space and how the users on the particular floor or in a particular space would function and behave. The "zones" or "affects" range from individual to collaborative, from "classic private library" to "diner study room," from formal living room to lounging play room (University of California, Merced, 2010). The university librarian there claims this approach to be a resounding success (B. Miller, personal communication, February 26, 2008).

Conclusions

As institutions of higher education consider changes in their approaches to education and research, the role of their libraries are at the center of discussions. Some skeptics have suggested that digital developments impacting the academy would marginalize libraries. Instead those developments, along with a millennia-old mission of providing access to information, and a newer one of information assessment, have made the clichéd "heart of the university" more vibrant than ever. Strong physical and electronic collections supportive of academic offerings and research, a physical facility that is comfortable, inviting, adaptable, and technologically sophisticated, and information and educational programming that furthers the classroom learning experience are all part of an effective academic library today.

A good physical structure includes a variety of teaching, learning, study, and research spaces, areas for individual work, group interaction, instruction, practice of presentations, and preparation of scholarly tools and products, all outfitted with sophisticated technology. Computing laboratories, electronic classrooms, training rooms, multipurpose seminar and meeting rooms, event and reception areas, and refreshment facilities all are essential. This examination of new learning spaces offers evidence that the modern academic library is maintaining its traditional mission while pursuing enhanced relationships with student and faculty support entities to the ultimate benefit of all academic clientele.

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