Designing a library: everyone on the same page?

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Excerpts are presented from an interview by the *Bulletin of the Medical Library Association* buildings projects editor with four academic health sciences library directors: one who had recently completed a major library building project and three who were involved in various stages of new building projects. They share their experiences planning for and implementing library-building programs. The interview explores driving forces leading to new library buildings, identifies who should be involved, recalls the most difficult and exciting moments of the building projects, relates what they wished they had known before starting the project, assesses the impact of new library facilities on clients and services, reviews what they would change, and describes forces impacting libraries today and attributes of the twenty-first century library.

INTRODUCTION

Bringing about and identifying the design features required to make the library a portal to the vast resources of electronic and printed resources is a combination of agony and ecstasy. Typically, an entire cast of characters, both inside and outside the library confines, is involved. Each brings a different viewpoint about what it should look like, how it should function, where it should be located on campus, and even whether libraries of the future will require a physical space or only exist in cyberspace. For many, the library planning process is part magic and mystery, part profession of faith and labor of love, and part yin and yang.

During MLA/CHLA/ABSC 2000 in Vancouver, Logan Ludwig, Ph.D., AHIP, *Bulletin of the Medical Library Association (BMLA)* buildings editor, talked with four health sciences library directors, one who had recently completed a major library building project and three who were involved in various stages of new building projects. James Shedlock, AHIP, director of the Galter Health Sciences Library, Northwestern University completed a major renovation project. Karen Dahlen, AHIP, director of the Library of the Health Sciences, University of Wisconsin (UW); Linda Watson, AHIP, director of the Claude Moore Health Sciences Library, University of Virginia; and Carol Jenkins, AHIP, director of the Health Sciences Library, University of North Carolina (UNC) were immersed in building new library buildings.

The group discussed many aspects of library building planning from how their projects were initiated, what aspects were fun, what aspects were tedious, who should be involved, what libraries of the future will look like, and what are the important building issues for librarians. Excerpts from this meeting and resulting correspondence follow.

Ludwig: Each of you has either recently built or renovated or are about to build or renovate a new facility. What was the major driving force that led your institution to invest in a new facility?

Shedlock. In the case of Northwestern University, a much-improved facility was needed to serve the traditional library function as well as prepare for the future by incorporating new ideas about what the library would do for users in the twenty-first century. For traditional functions, we needed to accommodate users, staff, and stacks. We downplayed the need for stack space to be the third priority (users and staff, first and second) during the mid-1990s when we were planning the library renovation; we did not foresee the end of print resources. We knew the number of new volumes would decrease over time, but there would always be the need for ''some'' stacks. Effort was spent more on trying to define the library of the future. Electronic

access and delivery of information were emphasized. This meant we had to concentrate on technology infrastructure issues for users and staff. Hence, the emphasis on placing conduits everywhere, on good-size carrels and tables for user workspace, on quality information machines (high-quality monitors, high-speed computers), and on good-size office space for staff, especially the professional staff and key positions.

Watson. We needed to renovate a twenty-five-year-old library at the University of Virginia Health Sciences Center. The library staff had been pushing for increased and more flexible space, and senior administration was supportive of upgrading the very visible library space to meet ''aesthetic standards of other new facilities'' (like the hospital, etc.). We were looking pretty shabby.

Dahlen. At the University of Wisconsin in Madison, our plan is to integrate three health sciences libraries into one to reduce resources and duplication (people, collections, and services). The new Health Sciences Learning Center (HSLC) is part of a larger HealthStar campaign intended to create an intellectual center for all health-related activities on campus. Components of this facility include a twenty-first century health sciences library, state of the art instructional facilities, information services for Wisconsin health care providers and consumers, a media development center, and medical school administrative offices.

Jenkins. At the UNC Health Sciences Library, we have retrofitted as much technology and new services as we can without making major changes. We even went ahead with a major first floor renovation to test a new single service-point model because of a strong desire to get it done. The current building is circa 1970, expanded in 1981, and the carpet and heating, ventilation, and air conditioning (HVAC) need to be replaced. The 1980 vision presumed that staff worked alone in offices and interacted with users in offices. It also presumed that users worked pretty much alone in the library. The vision did not address the impact of personal computing and networking on work and communication styles and did not reflect the dominance of the library's teaching-learning roles (instruction, multimedia development) or that the library supported multiple service points; nor did it place information technology systems at the ''hub'' of library services. It also assigned half of the library space to collection storage. All of these premises are different for us now.

Ludwig: Tell our readers about the major aspects of your project and who was involved in it.

Watson. Any major architectural project will involve a diverse group of people. We hired a library consultant

but were not satisfied with his suggestions. Others involved included an architect, the university's facilities management staff, a university interior designer, a construction contractor, the University Information and Telecommunications Office, furniture vendors (including compact-shelving vendors), a security consultant, a signage contractor, audio-visual consultants, me as library director, and the library staff. We also consulted our users via surveys and focus groups.

Jenkins. The UNC project is an $11 million renovation for which we are seeking $10 million in state funds and $1 to $2 million in private gifts. We selected the architect in concert with campus facilities planning staff in January 1998. We have worked through programming and design development with them and are ready to submit our plans for review through various campus and state agencies. We will be ready to begin construction documentation as soon as these reviews are complete. Our library senior management team has served as the building committee along with the campus architect. Our project manager for the renovation is Jim Curtis, associate director. Fifty percent of his time has been delegated to the renovation. We held many focus sessions with users to gather input and have continued to seek group and individual reactions to stages of design. At the same time, the campus began a master space planning effort led by another firm. We have linked our planning effort to theirs, and it has changed our original goals somewhat. The primary change has been from what we originally conceived as totally an interior renovation to exterior changes including relocating the front door, adding a service entrance, and adding disability and delivery parking adjacent to the library.

Shedlock. Our project is well described in the April 1997 issue of the *BMLA* [1]. As for involvement, we tried to include all the representative groups in the planning of the new facility: faculty, staff, students, administrators, and librarians.

Dahlen. The intent of the UW–Madison project is to integrate all aspects of learning at a site closest to the learning activity. The project has six user groups including the Core Group, an oversight committee representing the library and all three health professional schools (medicine, nursing, and pharmacy); the UW–Madison Division of Facilities Development; Campus Planning; and both architectural firms. Other focus groups that meet every two weeks are Administration, Library, Study and Instructional, Skills and Assessment, and Tech Core (includes the aspect of distance education). Early on, we were able to get a librarian on every group. I was a member of the Core, Instructional Focus, Tech Core, and Library Groups. Your question as to who is involved is a bit more compli-

cated, but I am guessing about seventy-five individuals, ranging from high-level administrators from medicine, pharmacy, nursing, the library, and campus planners to faculty and staff involved in teaching, patient care, and research. The Core Group is responsible for sign-off for general building design and siting.

Ludwig: What did you enjoy most about the project?

Shedlock. Planning is an exciting process. To plot out a goal and see it to fruition is very exciting. So in the end, the exciting part was seeing the planning ideas realized in "bricks and mortar." Meeting with the various groups and hearing what they value about the library, its staff and its services, was also very exciting. Interviewing the big Chicago names in architecture was another exciting feature of the project.

Watson. Unquestionably, for me, the most exciting aspect of this project was being part of a creative planning process, which will result in something real and beautiful that is a source of pride for library staff and library users.

Dahlen. I have really enjoyed the planning process, watching it change, becoming aware of political issues, and bringing those issues to resolution. A library building project also often creates new roles for the library. Our building will share space with other departments in a changing and dynamic organization. Examining our space needs has led us to examine ways we can cooperate and share resources and even how to meet needs that have not been addressed. In this process, you reconstruct the components of learning, the footpaths, adjacencies, and opportunities for cross training.

Ludwig: What was the most difficult aspect of your buildings projects?

Shedlock. Beside working with some difficult personalities, which is really part of your everyday job, probably the most difficult aspect of the Galter renovation was reconciling the various visions of the project. Particularly difficult to resolve were the inherent conflicts among those involved. Architects tend to want to make a statement. Librarians generally want a building that works and one that they can live with for themselves and for the users. The university architects and facilities management staff insist that everyone follow their rules, and they want to keep costs down so low that they risk building a structure that comes across as "cheap." Another aspect of a building project is the frustration of working with people who do not listen. While this is true in any human endeavor, it hits home during a building project, because decisions

have to be made quickly. Partners have to be ready to listen to each other and respect each other's perspective.

Watson. We had a number of administrative hassles and delays with the architect, too. However, I remember most vividly the difficulty of working within a tight budget. I remember losing two library project managers (Anne Humphries and Elaine Steen) and assuming a more detailed role myself, which I actually later came to enjoy. I also recall the difficulty of getting staff to focus on the *details* of what they wanted in their new space.

Dahlen. I would say bringing multiple groups together for consensus is the most difficult aspect. I wish I had better up-front information from key players about their vision for the library. The vision of the building project seemed to be changed in midstream without informing the players. Because the library consultant was negotiated out of the original contract, some aspects of visionary design could be compromised. A better understanding of political and thought processes could have made a difference.

Ludwig: What do you wish you had known or been told about before you started the project?

Shedlock. In retrospect, I would have prepared more on mechanical issues related to buildings: HVAC, lighting, electrical power, technological power, and so on. A pool of questions, broader than just a library focus, to ask the architects would have been useful.

Watson. With all the worrying and compromising that we did with the budget estimates, I wish we could have known that the construction contract would come in $500,000 *under* the estimate. By the time this became clear to us, it was too late to put the "extras" back into the state-funded project. So now we are running separate mini-construction projects to complete some of what we had to omit from the main project.

Dahlen. The answer to this question remains to be seen as planning for the UW HSLC is only about 30% complete. Competing and changing philosophies will undoubtedly have an impact on the project. Library staff have spent enormous time striving to meet deadlines while continuing to provide service and keep up to date with routine work.

Jenkins. Just how important and sometimes difficult it would be to satisfy requirements of the university, various codes, and the state was a surprise. Also, I was somewhat surprised at the expense of the project in the end. It is always going to cost more and be more difficult to raise the money than you thought in the beginning. Another thing is the length of time needed for planning, and the amount of time it demands from certain individuals.

Ludwig: What impact has the new facility had on your life or those who use or work in the facility?

Watson. Our project will not be completed until summer 2001, but new space is *greatly* appreciated. The construction process has provided an opportunity for much appreciated and increased communication with users. We have had *very few* complaints about the inconveniences. In fact, I have gotten many compliments about how we have handled the communications and transitions.

Shedlock. Everyone has been very pleased with the results of the project. Users will always say they want more chairs of a certain type, more study rooms, a lounge for getting food, and so on, but in general they, too, are pleased with the results.

I think one issue that haunts us is the configuration of service desks in the new library. We have too many desks, which are very hard to staff, especially when you are short of staff to begin with. We should have tried harder to save dollars from the project for additional staff. I console myself that the reason we have a "staffing the desk problem" is because we did a renovation and not a brand new building. There was no other way to arrange library departments than we did. Now, five years later, we have a staffing problem that is being addressed. But staffing is an expensive, long-term cost issue, so I do not know how we will manage in the future.

Ludwig: Hindsight is always twenty/twenty. If you had it to do again, is there anything you would change?

Shedlock. Yes, I would do a new building—would design a real library for the twenty-first century: all people space, all technology! At Northwestern, we had to work with what we had, and you can do plenty of good things using an older building. Renovation projects are like the wave of the future as we proceed through this current transition period of moving older library buildings forward to meet the demands of twenty-first century technology. Libraries will not disappear in the future because of new developments and implementation of technology. Rather, libraries will remain, because they continue to meet human needs. As long as we have humans who need to review the scholarly record of human endeavor, libraries as physical spaces will exist. Eventually, stack space may disappear when physical books become either too costly or irrelevant as information containers, but libraries will remain as long as humans want them.

Watson. I would not change any of the big things, but we forgot some floor penetrations for data and electronic connections in key places. We are considering going back and putting them in at extra expense and much noise and hassle. I also would have configured the reference faculty offices differently.

Dahlen. I am not sure what I would have changed during the design phase. We did reassign job responsibilities at a fairly high level within the library to improve communications. However, allocating the appropriate personnel to work on such a complex project is risky. Although we were able to get librarians infiltrated into all aspects of the planning and design process, it is important for the lead person to communicate clearly.

Ludwig: The next time, what would you make certain was or was not part of the project?

Shedlock. I would leave some personalities out of a future project! In other words, I would emphasize the need for more control to be centered in the librarians' hands and not elsewhere. I would also be more prepared on building issues—HVAC, electricity, mechanical, and so on.

Watson. I would have insisted on including the one stack and study area that we had to leave out of the main project.

Jenkins. One thing we often forget is how to plan for and implement appropriate art for the library. Most of us have absolutely no clue about this. Some kinds of art may require structural considerations in advance. We often end up doing this after the fact, and of course there is little money for it then.

Dahlen. The library's administrative reporting level is to the dean of medicine through a senior associate dean. Competing space philosophies, based on the integrated nature of the building, were definitely an issue for us. If we had been building just a new library, the library would have had consolidated support of all deans, associate deans, faculty, and more. I agree with Jim, some library personalities are not conducive to project work related to libraries.

Ludwig: We hear a lot about creating libraries that are flexible and user friendly. What does that mean to you?

Dahlen. In designing new library facilities, ease of use could mean one-stop shopping, whether it is for the walk-in or virtual user. As libraries take on more external roles, professional librarians need to take on consulting or triaging roles to manage time and ser-

vices more appropriately. Flexibility in a more virtual environment is likely to benefit from an integrated service desk approach and cross-training to maximize service.

Furthermore, a collaboratory environment required for flexible use inherently implies less traditional reference service and more emphasis on assistance for patrons using new technology. It also implies interpersonal and technical skills, project management understanding (related to downsizing the collection or the nature of Web-based projects), and subject knowledge to facilitate the learning in the curriculum or as part of the life-long process. This means library staff must be able to translate to patrons the value of information in relationship to the plethora of resources that exist. Space where people can get together to provide a new identity for the library is a critical part of the equation.

I think flexibility also means that there are views to all public workstations from service points, site lines to as many public aspects of the library as possible, openness, consolidated staff space to support cross-training, and space that promotes cultural activities. In planning for our new library space, flexibility also will depend on a research and development team to move the library and institution ahead without disrupting the service aspect.

Shedlock. What I hear Karen saying is that we need library buildings that can change easily without a lot of extra expense—that is, flexibility. As for user friendly, I mean buildings that are responsive to user needs: comfortable, workable, exciting human spaces.

Jenkins. Flexibility means fewer hard-built features in the library. It also means keeping space more open and not chopped up by walls that limit changes in purpose, use, and indoor environment. Of course, the staff has to be flexible too. The greater the fear of change, the less successful either the design or the outcome will be. We are placing much emphasis on the library being as ''self-evident'' as possible. That means many visual cues as to where to go and what to do there. We want the building to respond to user needs and habits, not to the library organization chart.

Ludwig: What was your original estimate for how long the new facility would serve your needs well, and do you now think that estimate is still valid?

Shedlock. We estimated ten years for collection growth. I think that after we weed and shift the collection this year, we should meet our goal. I wonder now, five years after the opening and looking at the speed of technological change, whether libraries need as much stack space! I foresee within another ten years a complete change for our library where we give up

the whole second floor space as book storage. As an example of this, the *Chronicle of Higher Education* recently ran an article about the Purdue battle in the economics library [2]. They need to reduce the library's real estate and are moving to trim the library from three floors to one!

Watson. Jim makes an interesting point. Our preplanning proposal looked at a second phase project for ten years from completion of this one that would add 24,000 square feet for expansion of our archives and additional student, instructional design, and study-type space (i.e., *user* space), *not* stack space (except more compact shelving for archives). We are part of the health system master plan, but there is no funding on the near (or far) horizon. Library-building funding is competing with funding for two new medical research buildings.

Jenkins. Most health sciences libraries tend to follow the model developed by the National Library of Medicine. That is, one library is the holder of record for older materials, and regional repositories are first resources for current materials. Today's libraries are developing a variety of cooperative arrangements, and technology is shifting the one-holder-of-record paradigm. We are also moving from the concept of one user using one item at any given time to multiple users using the same item at any given time. Interactive technology creates different space needs than normal office space.

Dahlen. Carol is correct. Automation and the Web have changed the function, organization, and operation of libraries. A significant shift in emphasis has resulted from these developments, one that places greater importance on access to information than on local ownership of comprehensive research collections.

Ludwig: Of all the forces impacting our libraries (e.g., Internet, automation, scholarly communications, curriculum changes, health care costs, etc.), are there any that you would point to and say, "This is the one that will affect libraries most?"

Shedlock. Electronic publications! The impact of e-book and e-journal services like MD Consult® changes everything quickly! I am all for preservation, but the reality of medical library operations is in the here and now. Currency is critical. We need to emphasize the immediacy of information access to serve our average user. Using technology to delivery information service is what users want *now*! Modern libraries have to be designed to respond to those immediate needs. In an e-information world, you do not need stacks! And stacks have defined the nature of libraries for hun-

dreds of years! We are breaking out of the mold that defines libraries, and we are hiring staff who are breaking the mold of what it means to be a librarian.

Watson. To the migration away from print resources and to increasing electronic resources, I would add the changes in our curriculum needs and our evolving overall mission and services.

Jenkins. All of these affect what we do. But I think personal computing and networking have had profound impact on how we envision our building.

Ludwig: What would you list as the most important attributes of a twenty-first century library?

Shedlock. Staff! Staff will define the library of the future. The power of the library is in its staff!

Watson. Service! As more resources are available online, we need to step up our service and consultation roles to help customers use the resources efficiently and effectively. We need to help save them time, the most precious commodity.

Dahlen. Important attributes of a twenty-first century library can be summed up in two words, automation and education. We are all moving as rapidly as possible toward providing Web-based access for important, high-use resources, and we are retooling staff to work in that type of environment. Strategies for dealing with print collections as we transition to a more electronic enterprise have to be resolved—perhaps in a preplanning phase. How to deal with collections is a primary issue in planning new libraries.

Jenkins. Be ready and able to adapt to change while being clear about the library mission and the real value of our profession. If we are clear about these and confident that we are equipped with fundamental skills and knowledge that are extremely important in the Information Age, the building issues, though they may change on the surface, will be met successfully.

Ludwig: What advice would you give anyone contemplating a major library building project?

Shedlock. Build for people—users and staff! Do *not* build for collections! Build beautiful space that can accommodate technology. Build with fantasy in mind— look at all the fanciful projections of what technology will do for people, and build around some of the ideas that apply most to information access and delivery.

Watson. First, insist on full input on all decisions right from the beginning. Second, pay attention to all the

details. Third, maintain a good relationship with your facilities management folks. Fourth, keep your users informed every step of the way. Fifth, remember to ask, ask, ask. Do not be embarrassed or too proud to ask why, where, how, or when. Finally, enjoy it!

Dahlen. The advice I would give to anyone contemplating a major library building project is to have roles defined up front and then review those roles reasonably often, given the changing political environment. One of my reminiscences of the planning phase was at the juncture of choosing the architectural team. We interviewed six teams from 7:00 A.M. until 5:45 P.M. At the end of the process, it seemed the choice was going to be made by the facilities and planning department as compared to the user groups. The library immediately sent a prioritized list to the dean of medicine. The list included those firms that had significant library experience, firms that had experience integrating space, and firms that had designed computer classrooms, among other features. Another piece of advice I would share is the importance of putting together a list of comparables early in the planning process.

Ludwig: How strongly do you agree or disagree that "all concepts, policies, and standards of librarianship must be challenged if we are to successfully plan buildings that will encourage efficient and effective service in this new environment" [3]?

Watson. I disagree somewhat. For sure, we need to adapt to new technologies and their capabilities. But I am convinced there is a role for the more traditional physical place, an intellectual haven, and libraries should be that place.

Jenkins. Fairly strongly, though while they should be challenged, not all will be found wanting. The trick is to hold onto the essentials and jettison the outmoded.

Dahlen. I strongly agree. As libraries compete with other units in the academic environment for resources (particularly budget and staffing), librarians need to understand the weaknesses of the profession in relationship to new knowledge and skills. Librarians planning new buildings need a credible understanding of the informatics, curricula, and outreach spectra, especially as they relate to the institution's mission. Perhaps we have to balance the library as a comforting space with the notion of space as an intellectual pursuit.

Shedlock. I agree but not strongly. It is not that librarianship has to be challenged as much as all users and all staff have to be challenged to think of what information access and delivery means to them and their work and their leisure. The statement puts a bur-

den on librarianship as if librarians alone are responsible for library buildings. We are *not* solely responsible, because we are a service profession that often has to respond to a higher authority. All who are responsible for libraries must be challenged if we are to plan space that is efficient and pleasurable to use and is effective in providing service to its users.

Ludwig: Then you would agree with Randall's statement that "The buildings which house our libraries today are not bad buildings or inadequate buildings because those who built them were fools. They are bad buildings because what goes on inside of them now is different from what was planned to go on inside of them" [4].

Shedlock. Yes, I agree strongly. Times and technology keep changing, and libraries as buildings cannot respond to change as quickly as people can. You can reuse buildings to meet new challenges, and that is the beauty of some buildings: their ability to retain architectural beauty, while they change their function.

Ludwig: Apart from the universal challenge of funding, two major inhibitions are ignorance and inflexibility. In light of all the combined wisdom and good intentions, what conspires to thwart the quest for a smart library?

Jenkins. I think people use libraries for different reasons, and this will continue to be true. The smart library is one that is adaptable to different and changing needs. The "high-tech, high-touch" cliché is very relevant to libraries. We have to meet needs at both ends of the spectrum. Apart from that, each library defines itself more or less in terms of its education, health care delivery, and research roles and should place relatively more or less emphasis on spaces that support these depending on its circumstances. I do not think ignorance has been a problem for us.

Shedlock. You need smart people to plan smart buildings. Ignorant people can be taught, but I do not know what to do about inflexible people except to remove them.

Watson. A big problem is the lack of vision of "what could be." Until recently, there was a lack of good models for our conservative administrations to actually see and learn from.

Ludwig: Boyer believes that "for many students, the ubiquitous computer has become the number-two pencil on campus. The campus has gone from the printed page to print-outs" [5].

Shedlock. Nothing more to say about the truth of the statement!

Jenkins. Maybe we will go from print on paper to data on screen eventually. The computer is not quite ubiquitous here, but it soon will be. The challenges for libraries are to address user needs for computers and network connections and peripherals as well as the knowledge they lead to. Both are moving targets.

Dahlen. The production devices may have changed, but the volume of paper goes on and on.

Ludwig: Some cynics say that technological innovation may accelerate in society at large but will not conquer universities and their libraries without a struggle [6].

Shedlock. I disagree. On the whole, I think universities and their libraries have been adopters, adapters, innovators, and even leaders in the use of technology. I certainly do not see a struggle here at Northwestern

Jenkins. I do not agree with this either. I think libraries are innovators in technology innovation. The campus as a whole is slower, but that is due to massive infrastructure investment and retraining needs. Conquer is not a word I would apply in this context. We use technology; it does not use us.

SUMMARY

Although approaches may vary, today's libraries are being designed to equally serve an on- and off-campus clientele. In other words, the library can be defined as a social institution through which individuals acquire intellectual property owned by someone else. Its role remains much the same as it has since the Great Library of Alexandria: to bring together scholars and their sources, regardless of distance.

Every great value system assumes an institutional form: Religion has its cathedrals, education its universities, medicine its hospitals, and learning its libraries. Only the most avant-garde propose the ''virtual state'' or the ''virtual church'' [7]. As for libraries, they are important because of what they contain (irrespective of format) and because they symbolize humanity's defining virtue: intelligence. The structure of the library may change, but libraries are likely to maintain a physical presence for some time to come. For those planning a library building or renovation project, we recommend that they:

- **Read broadly:** Highlight important points in articles and maintain lists of catalogs.
- **Attend professional conferences and institutes dealing with library issues:** Talk to colleagues about their projects and visit the vendor exhibits.
- **Visit other libraries:** Identify what works and what does not and compare the same functions from one facility to the next.
- **Be part of what your institution is doing:** Know your institution's mission and goals and know where the library fits in.
- **Carefully plan for a building design team:** The library director should define and quantify the needs of the library, identify uniqueness of clientele, and specify relationship of the library to other libraries and other institutional units. A building consultant to assist with site standards and design of the building program is recommended for projects of more than $50,000. Involve all necessary builders, contractors, and subcontractors as well as key stakeholders at the institution.

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