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Putting Learning into Library Planning

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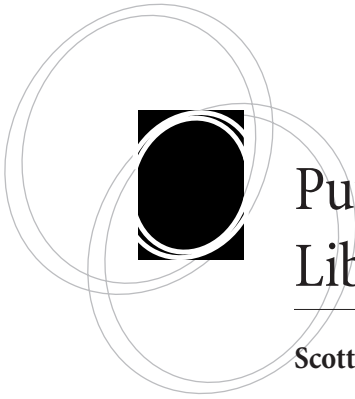
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Putting Learning into Library Planning

Scott Bennett

abstract: This essay notes the emergence of learning as a key factor in academic library planning. It argues for an improved, learning-oriented planning process by noting the dangers that arise from the priority usually given to fixing dysfunctional space and from the traps of mistaking the *things* of learning for learning itself and of thinking *with* the metaphors of learning rather than *about* what our metaphors actually mean. We can spring the trap by grounding planning in a sound concept of learning and by giving thoughtful attention to questions of ownership and presence in learning spaces. Five habits of highly effective planning are offered.

No one now plans an academic library without a learning commons. For the last twenty years, the learning commons has prompted librarians and others on campus to think collaboratively about the place of learning in libraries in quite different ways. The story of the learning-focused planning in academic libraries is one of considerable accomplishments and—I will argue—of consistently wasted opportunities. This essay presents that story and proposes a planning process that maximizes opportunities for strengthening learning.

Milestone Events

While one can trace some critical ideas about the learning commons back to the mid-1980s, milestone events for the learning commons happened in the years 1992–1994 in Los Angeles, Iowa City, Urbana, IL, and Granville, OH.

In August 1992, the University of Iowa Library in Iowa City opened its pioneering Information Arcade (now named a learning commons), and in 1994 the University of Southern California in Los Angeles opened its pacesetting Thomas and Dorothy

Leavey Library. These and other early innovators in what is now called the information or learning commons[1] saw rapid and fundamental change in information technology as primarily a service and pedagogical challenge. Students and faculty needed well-equipped facilities and instructional help in mastering information technology. The information commons offered both and represented a new element in the traditional panoply of services. Most significantly, the information commons required a fundamentally new degree of collaboration between librarians and information technologists, who brought different professional training and cultures together in newly designed spaces. These were seminal events. No one, going forward, could afford to ignore the provision of rich access to computing equipment and software or the collaboration between librarians and information technologists needed to maximize the value of a learning commons.[2]

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If these were the architecturally obvious events of these milestone years, two other events were even more momentous. The first happened in Urbana, when in 1993 the National Center for Supercomputing Applications at the University of Illinois released Mosaic, the first popularly adopted Web browser. It transformed access to networked information. And it dethroned librarians as search intermediaries, while it empowered readers to master the fire-hose flood of material released onto the Web in the 1990s. Mosaic and successor browsers decisively shaped the culture of the learning commons as it developed in the 1990s.

A second, equally momentous event of 1993 was perhaps a less obvious enabler of the learning commons. It happened at a meeting of the Board of Trustees at Denison University in Granville, OH. Given the severely overcrowded condition of the book stacks, President Michele Myers asked the trustees to approve a substantial library expansion. One of the trustees, William Bowen, then president of the Andrew W. Mellon Foundation, was profoundly uneasy with this approach. He wondered whether its driving force, the seemingly unstoppable growth of the print collections, might be changed. From this uneasiness grew JSTOR, now an immensely important online source of journal back files.[3] Within a decade, library directors were "regularly comment[ing] on their newly acquired ability to remove back files of journals from prime shelving space or from the collections altogether."[4]

A survey conducted in 2002 asked directors who had led library renovation and construction projects completed between 1992 and 2001 what had been the strongest drivers for their projects. Projects were, of course, driven by more than one need; those most often mentioned were accommodating collection growth (57 percent of respondents) and accommodating new study-space needs (45 percent of respondents).[5] Since 2002, few colleges and universities have invested significantly in new shelving for the collections, except for compact and high-density shelving installed as a way to free prime central-campus space that might be used for learning. More broadly, by easing the stranglehold

of the physical book on library space, Bowen and others who led the shift of collection growth out of physical and into virtual space opened the possibility for a new paradigm for library planning, which regularly advanced the learning commons as a core feature.

Print collections have now decisively lost their claim on high-value library space, giving way to learning spaces including the learning commons.[6] We have shifted hundreds of thousands of square feet of academic library space away from a mission *supporting* activity—that of shelving collections—to mission *enacting* activities—those of learning. In this regard, at least, the state of things in 2015 is the exact reverse of the early 1990s, giving us the paradigm shift we have witnessed in the last twenty years.[7] Academic libraries must no longer be understood primarily as agencies of information access, supporting institutional mission. They are now challenged to become agencies of learning meant to enact institutional mission.

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The Planning Trajectory

The information commons gave academic library planners unprecedented conditions: new academic partnerships and, for the first time ever, shrinking demands for shelf space. Unfortunately, in my experience, our planning process has too often rushed to populate the newly available space without thinking systematically about the opportunities for learning the new conditions create. All too often, planning remains dominated not by the wrong *things,* but by the wrong *priorities.*

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The library planning experience of a prominent private university illustrates this common failing.[8] This library set the following, *thing*-dominated strategic goals:

- Focus on public services: study / learning spaces, main entry and service points
- Create a graceful and inspirational environment: reclaim beautiful historic spaces
- Create an integrated, logically organized library building with improved way-finding
- Improve and expand special collections and related exhibit space
- Rearrange collections space: add compact shelving where appropriate
- Improve staff adjacencies: locate staff efficiently, with proximity to appropriate work areas
- Enhance the learning environment, including a larger Information Commons
- Balance student needs with collections space
- Create an auditorium or large multipurpose space
- Create a café and browsing area.

Attention to each one of these *things*—main entry, service points, historic spaces, special collections and related exhibit space, collections space, compact shelving, improved staff adjacencies, work areas, a larger Information Commons, an auditorium or multipurpose space, a café, and a browsing area—was surely needed, but almost all of them relate to deficiencies of the existing building or to the need to improve operational efficiency. Only two goal statements, those involving study/learning spaces and learning environment, explicitly mention the core learning mission of the university—without, however, identifying any particular concept of learning that might drive planning. The library's strategic vision was arguably tangential to learning from the beginning, and the priorities evident in this list have more to do with fixing the building in ways that *support* the university's mission than with *enacting* that mission.

If learning lacked salience in this library's strategic plan, it almost completely disappeared from the next critical planning document, a feasibility study. This document of more than 150 pages did what such studies typically do: it set out goals, documented existing conditions, and considered different options for realizing goals—that is to say, different options for getting everything that was desired to fit reasonably within the available space. Learning spaces get only 107 words among the many thousands of the study. And the world of *things* (indicated here in italics) dominates even these 107 words, just as it does the entire feasibility study:

> Under the proposed scheme the *Information Commons* is enlarged, but would also add a new *collaborative computing suite,* where small groups can meet to work, with easy access to *computers* and *multimedia environments* as well as *information resources. Study space* will increase, and the types of study space will change as well. New options for users will include the new *Grand Reading Room* and *Special Collections reading room,* individual *quiet study spaces, small open tables* for informal groups, and *group study rooms.* Many of the existing isolated study carrels scattered through the stacks will be eliminated in favor of more flexible study spaces, in more pleasant environments.

The purpose, the priorities that drive interest in these *things* is not made clear, other than that access to computers will be "easy" and study spaces will be "more flexible" and "more pleasant."

The university next issued a request for qualifications (RFQ) for the renovation of the library. The purpose was to identify the architectural planning team best qualified to realize the university's ambitions for the project. Consider how the following statement, taken from the RFQ, reflected university goals and what it implied as regards desired qualifications:

The project will consist of, but not be limited to, the following elements:

- *Fire sprinkler system* and *life safety upgrade*
- Wayfinding
- *Replace HVAC equipment*
- *Improved infrastructure*
- Consolidate service points
- *Renovation of all restrooms*
- Creation of a grand reading room
- Creation of a special collections reading room

- Creation of a distinct special collections library
- Creation of auditorium/gallery
- Creation of an expanded information commons
- Creation of a collaborative computing suite
- Creation of a café and browsing area
- Increase and improve user spaces
- Consolidation of collections to gain efficiencies.

To the library's strategic goals, the RFQ added a set of unquestionably important requirements (indicated in italics) related to the good operation of the building as a building. Still more *things* to be done, still more *things* to be accommodated. There is no hint that the planning team's expertise (or lack of it) with regard to learning spaces is important to the assessment of qualifications. The RFQ gives no indication at all of the priority assigned to any of the *things* to be done in the project.

This university's move from strategic goals to a request for planning qualifications merits detailed attention because it typifies much library planning and makes clear how little salience learning often has. No one will quarrel with the necessity of replacing obsolete heating systems, improving way-finding, renovating restrooms, consolidating service points, or building auditoriums. One would, nonetheless, think that a university preparing to spend, say, $250 a square foot on renovating a large building would give particular attention to the return of that multimillion-dollar investment on the learning that is central to its mission. No such attention is evident in the feasibility study or the request for qualifications. And given the near certainty that renovation ambitions will outstrip the project's budget, one would think that some sense of priority among all these things and tasks might be indicated. None was.

There is, in my experience, nothing unusual in the unhappy planning trajectory just described. Libraries commonly have vision and mission statements with ringing declarations about learning. These declarations are usually echoed in the documents that launch planning. But even in the visioning stage of planning, possibly abstract notions of learning regularly give way to more concrete issues such as service delivery, office space, and code compliance. And when projects get to the programming and conceptual design stages—when, as some might say, the *real* planning begins—fine declarations about learning usually have little actual impact on the way people think or on the decisions they make.

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There are two primary reasons why we so regularly fail to attend to learning and fail to assign priorities. The first is that we almost always have spent many frustrating years living with dysfunctional buildings. The chance to renovate a library gives us, to be sure, the chance to enhance its capacity to foster learning. But what often drives us more powerfully, as the planning documents quoted here indicate, is the chance to *fix things.* Whatever we may say about learning, our actual priorities are usually operational—

both facilities operations and library operations. We spend huge sums to fix vexing operational problems; we invest comparatively little in the learning enterprise of our colleges and universities.[9] Put another way, our actual priorities have much more to do with the problem of owning buildings and running libraries than with the problems of learning. Operational problems unquestionably have a claim on our attention and resources, but they too regularly command much more attention than our challenges and opportunities as educators.[10]

Escaping the Planning Trap

While the tension between stewardship of facilities and of learning is inescapable, there is a second pervasive problem: a self-imposed planning trap that we can, if we will, escape. It is the trap of mistaking the things of learning for learning itself. We know how mistaken our previous assumption was that if one gives good lectures, students will learn.[11] We are making a parallel mistake today in believing that if we provide a learning commons or collaborative learning spaces or a lot of high-end technology, students will learn—and we will have met our obligations to the learning mission of our colleges and universities.

Returning to the learning commons will help us see the planning trap here. The phrase *learning commons* is, of course, a metaphorical expression. Over the last twenty years, it has become a familiar metaphor that embodies some common-sense ideas about how learning happens. We have come to rely on this received wisdom and have largely stopped thinking about what our metaphor might actually mean as regards learning and commonality. As one thoughtful commenter, the British educator and architect Jos Boys, observes: "Metaphor . . . is a useful but dangerous tool for designers, their clients and users. It can represent a social-spatial idea and give it the appearance of 'obvious' and 'commonly agreed' reality, especially where it becomes a well-recognized convention through time." But in becoming so obvious, Boys says, our metaphors "become the 'common sense' we think *with* rather than *about,*" so that they "all too easily become a substitute for critical analysis."[12]

More particularly, our avoidance of critical analysis in favor of common sense and obvious realities typically mistakes affordances for what affordances enable. In architectural design, affordances are the things in an environment that a person sees as communicating possibilities—usually possibilities for action. So a large digital screen may be seen as affording the possibility of working collaboratively on a problem displayed there. Or it may not. A key to ensuring the desired communication (and successful affordance) is a conceptual model that informs every aspect of the design. This underlying conceptual model is the really hard and important part of planning and design.[13] We talk endlessly about designing for learning. But what concept of learning actually informs our talk? How many of us start planning library space for learn-

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We have, if we wish to use it, an immense professional literature on learning to guide critical thinking. And whatever our wishes may be, we are all confronted by demands to identify and measure learning outcomes.[14]

But even in this environment, the concept of learning we actually use is rarely more sophisticated than that sometimes students prefer to work alone, sometimes they would rather work collaboratively, and sometimes they like to make things. This is a patently simplistic concept of learning; it almost entirely fails to engage with the stance of an intentional learner.[15] It is difficult to find libraries that have taken a more sophisticated view of learning as their point of departure.[16]

To spring the planning trap that our use of metaphor sets, we must purposefully create a conceptual model of learning to inform our design of learning spaces. Such a model will help ensure that the *things* of learning, the affordances we create—such as the learning commons—actually foster learning in a way that we might assess.

One effort to do this involved identifying a set of observable, measurable learning behaviors that have been validated as features of effective educational practice.[17] By surveying both students and faculty members, it is possible to determine which of these behaviors are actually important to students and teachers, how well a campus provides space for learning behaviors community members regard as important, and where on campus these behaviors take place. How might such information inform planning? Consider that faculty members and students usually disagree significantly about which learning behaviors are important. Consider too that an institution, when investing in space, might shape its investment to foster a better alignment of student and faculty values so as to advance its mission. Or consider the cybercafe. Few libraries would now forgo this potent combination of food and technology. But its design is typically driven primarily by the requirements of food service and technology providers. The design could, instead, be molded by a wish to foster specific learning behaviors identified by the institution as critically important to achieving desired learning outcomes. These behaviors might include student-faculty interactions beyond the classroom, discussions among students of classroom material, diversity-prompted learning, and others. What is essential is making a powerful three-way connection in planning among institutional learning goals, observable learning behaviors, and space design.

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A Process for Successful Planning

Happily, invaluable guidance is available for getting the proper alignment of learning goals, observable behaviors, and space design. An excellent point of departure is Jos Boys's *Towards Creative Learning Spaces.* Herself an architect and teacher, Boys recognizes the central importance (and difficulty) of setting a concept of learning that can guide planning. Her book endeavors "to discover what are the right sorts of questions to ask, and the important issues to address, in order to create enhanced conditions for learn-

ing."[18] In doing this, Boys brings home the deficiencies of most current practice and the value of changing our practice.[19]

Consider the following description of our usual planning practice. As regards the idea of learning, we typically satisfy ourselves with the concepts of individual and collaborative learning and with just a handful of spaces (for example, reading rooms, group studies, computer stations) that afford these activities. And when planning a learning commons, we focus on bringing librarians, information technologists, and tutoring staff together in a space meant to accommodate a lot of students and computers. We often use the metaphor of "one-stop shopping" to represent a primary value created by this co-location, and we almost never reflect that this familiar, common-sense metaphor has everything to do with consumerism and little to do with learning.[20] What would a more thoughtful planning process look like?

Start with a Different Concept

Imagine a different point of departure. Imagine joining with Boys in holding that learning in higher education is distinctive from the ordinary experiential learning of everyday life and from work-related learning. In higher education:

- Individuals deliberately come to our "learning space" to open themselves to new knowing.
- Our learning space is particularly concerned with the "unstable" region between what the individual already knows and what she or he is learning about; it is the place were new forms of thinking and doing take hold.
- All participants (students, teachers, researchers, and staff) undertake generative activities related to knowledge creation and development.
- Learning in higher education has the potential not only to change individuals, but also to challenge and alter the communities of practice, both of the subject discipline and of learning itself.[21]

Given these distinctive features of college and university learning, image further that we join Boys in conceiving of learning as what she calls "a form of transitional space":

> . . . with boundary crossings or "thresholds" en route to not just a new kind of knowing but also to becoming a new kind of *person.* Initial boundary conditions orchestrate how both cerebral and embodied "rules of the game" are disclosed to potential new entrants as they negotiate the various processes of joining the communities of practice of . . . [higher] education. Once on or across such borders, these communities offer frameworks of varying kinds . . . for enabling increasing belonging as well as safe-enough conditions to enable risks to be taken and expertise . . . to be developed. Importantly, the learning process takes *time* as existing knowledge is challenged and alternative approaches and attitudes are "incubated." Learning, then, is more a series of iterative, repetitive and often confusing encounters than a step-by-step, outcome-by-outcome accumulation of knowledge and skills. The journey leads—in the right conditions—to a step change in understanding, a crossing of thresholds. It is about both "getting it" and becoming embedded in a subject, so embedded that the frameworks and repertoire of the community of practice become increasingly common sense and unnoticed as expertise is developed.[22]

This is, of course, a constructivist concept of learning, which has its roots in the work of Jean Piaget and other educators. For our purposes, such phrases as "becoming a new kind of person," "joining communities of practice," "crossing boundaries,"[23] "feeling safe enough to enable risk taking," and "encounters" rather than "accumulation" represent key concepts of learning that should become critical elements in the planning and design of library space.

Inform Your Planning

How might we shape our planning in this way? Happily, many excellent guides to informed planning are available. These include:

- EDUCAUSE's pioneering publication *Learning Spaces,* edited by Dianna G. Oblinger (Boulder, CO: EDUCAUSE, 2006), http://www.educause.edu/research-and-publications/books/learning-spaces. This wonderful book includes many essays on general principles and practices in designing for learning as well as a score of case studies.
- The Learning Space Toolkit: A Resource for Designing and Sustaining Technology-Rich Informal Learning Spaces, sponsored by North Carolina State University in Raleigh, the consulting firm brightspot, the Institute of Museum and Library Services, and AECOM Design + Planning, http://learningspacetoolkit.org/. This site offers a rich variety of planning tools for every phase and every aspect of learning space planning.
- Learning Space Rating System (LSRS), Version 1, September 2014, sponsored by EDUCAUSE, http://www.educause.edu/eli/initiatives/learning-space-rating-system. The intention is to provide a set of measurable criteria to assess how well the design of classrooms supports and enables active learning. These criteria form the basis for a rating system that will allow institutions to benchmark their projects against best practices within higher education. The current version of the LSRS deals with formal learning spaces, but future versions will include informal spaces and more specialized spaces.
- A design and planning blog by Elliot Felix, founder of brightspot, http://brightspotstrategy.com/blog/. Felix comments on a wide variety of learning space topics, including academic libraries. Entering the word *library* in the site's search box produces scores of results.
- The Learning Spaces Collaboratory's November 2013 publication *A Guide: Planning for Assessing 21st Century Spaces for 21st Century Learners,* http://www.pkallsc.org/assets/files/LSCGuide-PlanningforAssessing%281%29.pdf. This guide insists that planning be well grounded conceptually, and then offers best practice guidance on assessing how well we advance our concept of learning through built space.[24]

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Beyond these specific publications, there is a large literature on libraries and learning, some of which is referenced in the notes to this essay. Some of voices in this literature

that have been consistently thoughtful and thought-provoking are those of John Seeley Brown, Kenneth A. Bruffee, Joan K. Lippincott, and Phillip D. Long.[25]

Answer Two Key Questions

Excellent as these publications are, they do not specifically address two closely inter-related and critically important questions in designing library space for learning. If we address these questions thoughtfully, we will have gone a long way toward meeting our responsibility for conceptually informed planning. The first question is, Who owns the space? The second question is, How will we shape the experience of becoming in the library—or, more specifically, how will we shape the threshold experience of moving from not knowing to knowing and the relationship between novice and expert?

But wait, one might ask, how can we talk about the ownership of library space? Or rather, how can we fail to see that any distinctive claim to ownership is impossible because almost everyone on campus—students, faculty, and staff—registers an ownership claim to the library? But look at how we actually shape the presence of staff in the library. We regularly plan for service desks and often include staff offices in or immediately adjacent to key spaces such as the learning commons. The inescapable message to students is that they are expected to come to us as service providers and the owners of service space.

If we only look about us, we will see it is not hard to conceive of learning spaces free of ownership claims made by librarians and other staff. Over the last twenty years, colleges and universities have increasingly provided commons spaces in many academic buildings.[26] Sometimes they are simply found space, usually in buildings designed long ago. But increasingly—and notably in science buildings—educational institutions have included commons spaces in the formal program in the same way that they have included offices, classrooms, and laboratories.

To the assertion that these are a different kind of learning space because no services are offered in them, one can only respond: Exactly so. Moreover, we have the telling example of tutoring programs to instruct us in how services function with much lighter assertions of staff ownership of space. The key design decision in many (not all) tutoring spaces is that no one occupies them permanently and that tutors

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and tutees—usually peers of each other—both come to the space. Staff offices may be adjacent to the tutoring space, or distant from it, but students unmistakably own the actual tutoring space—the actual learning space—as they occupy it.

The ownership of learning space is only one aspect of how we manage staff presence for learning. An equally fundamental issue is how our presence shapes our relationship with students. Our reliance on service desks ineluctably shapes this relationship as a transactional one that occurs between a person who knows something, the staff member, and a person who lacks knowledge, the student. The desk marks this boundary condition clearly and reinforces the authoritative position of the person behind it. The desk is also a device for managing queuing, when circumstances require queues. And where desks are used to provide "one-stop shopping," they reinforce a transactional, consumerist vision

of what we do.[27] We have tried various designs to mitigate these baleful features of the desk, and—tellingly—we emphasize how frequently our actual service provision takes us away from the desk. But we have rarely been able to conceive of service provision without rooting it in a service desk. In essence, then, we have rarely been able to think of how we can present ourselves to learners—how we establish our relationship with learners—without using the desk to define who we are and how we work.

Alternative ideas of presence lie ready to hand. Again, we need look no further afield than the tutoring programs of our institutions. By far, most tutoring is done not by professional staff, not by the acknowledged experts, but by student peers. Much of the professional staff effort goes to the thoughtful training of peer tutors, and when professional staff take part directly in tutoring, they most often do so in an explicit coaching mode. In these ways, tutoring staff conceive of themselves as "guides by the side," not as "sages on the stage," and they shape tutoring space to reinforce this role. Their behaviors and the way they design their learning spaces send a consistent and powerful message about the relationship they wish to have with learners and the process of learning.

Few libraries run their reference service in the way student services run tutoring. We all too often dismiss the idea of doing so as *bad library service,* disregarding the daily reality of *good learning* achieved by tutoring programs.[28] Of course, it is true that librarians regularly wish to think of themselves as learning coaches. But our behaviors and the way we design space send at best a mixed message. More often than not, our behaviors and space design assert a "sage on the stage" presence that is important to our sense of professional self and quite at odds with our

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frequently professed intention. This essay began with a statement about consistently missed opportunities in planning for learning; it perhaps should have spoken of consistently self-defeating behaviors.[29]

To improve, indeed to transform planning libraries for learning, we must become conscious of the chief vulnerability of our planning process and of the self-imposed trap into which our planning regularly falls. The vulnerability is planning driven by the wrong priorities, while the trap is thinking *with* metaphors rather than *about* metaphors. These process errors produce libraries that fall short of realizing their full impact on institutional mission.

Conclusion: The Five (Not Seven!) Habits of Highly Effective Planning

Start Early and Set Priorities

Start early, set priorities, and stick to them. Do not wait until you have funding, or even the prospect of funding, to begin planning. In a highly competitive environment for funding, it is usually the need to solve pressing problems that motivates colleges and universities to invest in libraries. We used to depend on collection growth to trigger space crises every twenty years or so. That driver is largely gone. So it is now aging mechanical systems, outdated electrical supply, code-compliance issues, or just the increasingly dysfunctional accumulation of formerly expedient fixes that are forcing the issue. To

be sure, these are real problems and require attention. The challenge is to ensure that a mission-driven concern with learning claims at least equal attention as projects take form and are funded. The best way to do this is to start early and, at every turn, inculcate the view that it is the library's potential impact on learning that makes it competitive with, say, a much-needed new science building. Starting in this way, and starting early, enhances your competitive position. But it also will give you the immense satisfaction of getting your project strongly aligned with institutional mission.

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Think *About* Metaphors

We saw earlier both the common-sense ease and the danger of thinking *with* metaphors. The alternative is to think *about* our metaphors.

Think About the Learning You Are Planning For

Exactly what do you mean by the term *learning*? How does your definition of the thing you are planning for align with the literature of learning theory?[30] How does it align with efforts to identify and assess the impact of good practices in teaching and learning? Keep testing the power of your definition to drive effective planning, and when you see your work settling around common-sense truisms—such as students want space for collaboration and for working alone, or if you build it they will come—go back to your definition to see if it cannot be enriched so as to drive more thoughtful planning.

Think About the Issue of Ownership

Who owns library space, and on what terms is that ownership asserted? How are ownership claims made manifest in your planning and design decisions? How will you keep issues of ownership and of presence separate?

Again, be wary of common-sense truisms—such as we need a service desk or that learning is advanced by one-stop shopping. Be vigilant about how such truisms can lead you to asserting ownership claims when the real problem is that of having a presence in learning space.

Think About Your Metaphors

Ensure that you are thinking *about,* and not just *with,* your metaphors by building an assessment protocol into your planning from the outset. Embrace the discipline of demonstrating in some way that your plans are a credible means for enhancing learning outcomes.[31] Recognize that an inability to assess your plans in this way may signal that planning has strayed from its mission-driven priorities.

Divide the Problem

Consider planning as requiring at least three domains of expertise: those involving the design of space; those involving furniture; and those involving pedagogy. We depend-

ably turn to architects and interior designers for help with the first of these, involving (for instance) the management of light and noise, the good provision of electrical power, and effective way-finding. We also regularly look to furniture makers for thoughtfully designed furniture that accommodates a variety of learning behaviors. But do we anything like so regularly draw upon the immense professional literature of learning in our planning? How intensely do we involve those on our own campuses who are working to enhance learning and teaching?

Conquer the Problem Through Collaboration

Strengthen your focus on learning by enlisting as planning partners other key groups deeply concerned with students' academic success. These are your colleagues in academic technology; in student services who manage tutoring programs and coach students in effective study habits; and—most important—classroom faculty members. Look for agencies already in place on your campus, such as faculty development programs or committees charged with academic planning, as fertile sources of collaborators.[32] All of these people bring to the table significantly diverse professional backgrounds, various notions of service, and different standing in the academic hierarchy. These differences can be hard to manage, but they can also be an immense source of strength in keeping library projects focused on learning priorities—rather than just fixing problems with the building. An early insistence on deeply collaborative planning will help ensure that library space is shaped around collaboration and learning and does not settle, as sometimes happens, for the mere co-location of services.

Rethink Presence

Presence involves issues not only of ownership but also of pedagogy. Student services staff are most likely to see their work as fundamentally rooted in issues of pedagogy, whereas librarians and academic technology staff may often think of their work as fundamentally involved with service delivery.[33]

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Consider the importance of a pedagogically rooted understanding of presence in working with classroom faculty to plan effective learning spaces. Again we have important metaphors to think about: those of the "sage on the stage" and of the "guide by the side." The challenge is to think carefully and deeply about the relationship of students to staff, of novices to experts. The challenge is to think about communities of practice and how students are drawn into those communities, how they cross the thresholds of knowing. The issue of staff presence is the most decisive one in planning library space for learning. Get this one right, and we are likely to have remarkably successful learning outcomes.

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Notes

1. David Murray kindly identified a useful thread of exchanges on the genesis of the learning commons, accessed October 24, 2014, and available at the INFOCOMMONS-L Archives at http://listserv.binghamton.edu/scripts/wa.exe?A1=ind1201&L=INFOCOMMONS-L.

2. For the University of Iowa Information Arcade, see Carol A. Hughes, "'Facework': A New Role for the Next Generation of Library-Based Information Technology Centers," *Library Hi Tech* 16, 3–4 (1998): 27–35; for the Thomas and Dorothy Leavey Library, see Deborah Holmes-Wong, Marianne Afifi, and Shahla Bahavar, "If You Build It, They Will Come: Spaces, Values, and Services in the Digital Era," *Library Administration & Management* 11, 2 (1997): 74–85. For a 2012 survey among Oberlin Group libraries about the relationships among libraries, information technology operations, and writing and tutoring centers, see Bryn Geffert, "Library & IT Living Arrangements in Oberlin Group Libraries," accessed October 24, 2014, http://www.oberlingroup.org/node/13540.

3. Roger C. Schonfeld, *JSTOR: A History* (Princeton, NJ: Princeton University Press, 2003), 1 ff.

4. Scott Bennett, *Libraries Designed for Learning* (Washington, DC: Council on Library and Information Resources, 2003), 11; accessed October 24, 2014, at http://www.clir.org/pubs/abstract/reports/pub122.

5. Ibid., 7.

6. There are, of course, exceptions. See the account of faculty resistance to an off-campus shelving facility at Colby College in Waterville, ME, reported in the Waterville *Morning Sentinel* by Matt Hongoltz-Hetling in his April 15, 2014, story, "Colby Library Renovation Ignites Debate over Role of Physical Books in Digital World," accessed October 24, 2014, http://www.pressherald.com/news/Colby_library_renovation_ignites_debate_over_role_of_physical_books_in_a_digital_age_.html.

7. See Scott Bennett, "Libraries and Learning: A History of Paradigm Change," *portal: Libraries and the Academy* 9, 2 (April 2009), 181–97; also available under the Experience/Publications tab at the author's Web site, accessed October 24, 2014, www.libraryspaceplanning.com.

8. The strategic goals, feasibility study, and request for qualifications quoted here and in the following paragraphs are used with the generous permission of the university that authored them.

9. There is nothing unique to library planning in the misdirected efforts just described. Consider what Lev Gonick says about planning for information technology:

   > More fundamental re-examination of our organizations is in our immediate futures . . . The functional IT organization is layered following a traditional stack of services from underlying infrastructure like network engineering, servers and storage, data base and application services, academic and administrative technology subject matter experts, and customer support. Over time, the logic and reproduction of the functional organization has squeezed out innovation in favor of core operational services. In many organizations 90 percent or more of the IT staff and financial resources are allocated to daily operations . . . Many IT professionals are as passionate about the academic and research missions of our institutions as our faculty. The functional organization model makes it increasingly more difficult for IT on campus to be a meaningful partner and contributor to the strategic future of the University if and as it gets painted into the corner of being an expensive infrastructure cost center.

   See "The Year Ahead in IT, 2013," *Inside Higher Ed,* January 2, 2013, accessed October 24, 2014, http://www.insidehighered.com/views/2013/01/03/predictions-about-higher-ed-technology-2013-essay.

10. The story of a new building project would be different from the one told here. Such a project would be less constrained by fixed realities than a renovation project; but the experience of the old building will have an inescapable and powerful influence on planning for a new one, and budget limits always exist and usually drive attention toward *things* and away from vision.

11. A classic account of this pedagogical trap is Robert B. Barr and John Tagg, "From Teaching to Learning—A New Paradigm for Undergraduate Education," *Change* 27, 6 (November 1995): 12–26.

12. Jos Boys, *Towards Creative Learning Spaces: Re-Thinking the Architecture of Post-Compulsory Education* (New York: Routledge, 2011), 27, 3.

13. In *The Psychology of Everyday Things* (1988), Don Norman introduced the design world to the concept of affordances, first developed by the perceptual psychologist J. J. Gibson. In his July 30, 2004, essay, "Affordance, Conventions and Design (Part 2)," accessed October 24, 2014, http://www.jnd.org/dn.mss/affordance_conventi.html, Norman observes, "The most important part of a successful design is the underlying conceptual model. This is the hard part of design: formulating an appropriate conceptual model and then assuring that everything else be consistent with it. I see lots of token acceptance of this idea, but far too little serious work."

14. See George D. Kuh, Natasha Jankowski, Stanley O. Ikenberry, and Jillian Kinzie, *Knowing What Students Know and Can Do: The Current State of Student Learning Outcomes Assessment in U.S. Colleges and Universities* (Urbana, IL: National Institute for Learning Outcomes Assessment, 2014), accessed October 24, 2014, http://www.learningoutcomeassessment. org/documents/2013%20Abridged%20Survey%20Report%20Final.pdf.

15. The term *intentional learning* along with cognate terms *metacognition, autonomous learning,* and *self-directed learning* are frequently used in learning theory. The editors of the landmark survey *How People Learn* (Washington, DC: National Academy Press, 1999) use the term *metacognition* to designate a set of activities through which a person becomes a self-conscious and self-regulating learner. These activities include "the ability to orchestrate one's learning: to plan, monitor success, and correct errors when appropriate—all necessary for effective intentional learning" (97). The term *intentional learning,* as developed by Carl Bereiter and Marlene Scardamalia, refers to "cognitive processes that have learning as [an intrinsic] goal rather than an incidental outcome." The behaviors characteristic of intentional learning include building a problem-solving framework for approaching learning, taking responsibility for high-level skills normally exercised by the teacher, setting personally meaningful learning goals that subsume (and therefore satisfy) externally imposed schoolwork goals, and self-assessing one's own success in learning (see "Intentional Learning as a Goal of Instruction," in *Knowing, Learning, and Instruction: Essays in Honor of Robert Glaser,* ed. Lauren B. Resnick [Hillsdale, NJ: Erlbaum, 1989], 385–88).

16. At least two projects took learning seriously as their core concept. Jill Gremmels was the director of the Robert and Sally Vogel Library at Wartburg College in Waverly, IA, in the 1990s. She commented, "Libraries have tried to support learning, but I don't think libraries have traditionally said 'We want to make learning happen here.'" Acting on this difference, Gremmels and her colleagues changed the questions with which they began:

    > We didn't start out with what I think is the traditional question, 'How much stuff do we have to get in this building, and what kind of stuff is it?' . . . We didn't do that. We started out the planning by saying, 'What do we want to happen in this building?' And the answer to that was that we wanted to be much more proactive about promoting learning . . . We wanted the architecture to make [the library] be like a think tank atmosphere, where there would be lots of exciting ideas bouncing around, and people could interact with each other and text and whatever technological stuff they might require, so that great minds could do their thing in this space" (Bennett, *Libraries Designed for Learning,* 3, 27–28).

    A second, more recent project is the Mary Idema Pew Library at Grand Valley State University in Allendale, MI. The idea that students should own their learning space was fundamental to every aspect of the planning and is evident everywhere, from the absence of any reference desk and indeed of any staff, except a handful of student employees, to the absence of signs meant to govern behavior. Eschewing authoritative prescription and direction figured from the first in planning the Pew Library. Here is how Lee Van Orsdel, dean of university libraries, described initial planning for what would become the library's

Innovation Zone: "When we tried out a space like the innovation zone with students, we gave them whiteboard space, a bunch of Legos to play with, and the ability to use the space however they wanted and they figured it out right away" (*Grand Valley Magazine* [Summer 2013]: 8).

17. See Scott Bennett, "Learning Behaviors and Learning Spaces," *portal: Libraries and the Academy* 11, 3 (2011): 765–89; also available under the Experience/Publications tab at the author's Web site, www.libraryspaceplanning.com (accessed October 24, 2014).

18. Boys, *Towards Creative Learning Spaces,* 2.

19. Boys's book is an excellent point of entry for the energetic and wide-ranging exploration of learning space issues throughout the United Kingdom. See also Boys's Web site, accessed October 24, 2014, http://www.josboys.co.uk/. Another excellent guide to planning is Chris Johnson and Cyprien Lomas, "Design of the Learning Space: Learning and Design Principles," *EDUCAUSE Review* 40, 4 (July–August 2005): 16–28, accessed October 24, 2014, http://www.educause.edu/ero/article/design-learning-space-learning-and-design-principles.

20. For instance, the "Philosophy" statement for the new Richard J. Klarchek Information Commons at Loyola University Chicago asserts that "providing a one-stop shopping experience for all types of information needs" is one of the chief objectives in design trends for the information commons; accessed October 24, 2014, http://www.luc.edu/ic/mission.shtml.

21. Boys, *Towards Creative Learning Spaces,* 72.

22. Ibid., 132.

23. For a discussion of the concept of thresholds as applied to information literacy, see Barbara Fister, "Crossing Thresholds and Learning in Libraries," *Inside Higher Ed,* May 23, 2014, accessed October 24, 2014, http://www.insidehighered.com//blogs/library-babel-fish/crossing-thresholds-and-learning-libraries#sthash.9PudL8cY.dpbs.

24. It begins by quoting Douglas Thomas and John Seely Brown, *A New Culture of Learning: Cultivating the Imagination for a World of Constant Change* (Seattle, WA: CreateSpace, 2011):

> For much of the 20th century, learning had focused on the acquisition of skills or transmission of information or what we define as "learning about." Then, near the end of the 20th century learning theorists started to recognize the value of "learning to be," of putting learning into a situated context that deals with systems and identity as well as the transmission of knowledge. We want to suggest that now even that is not enough. Although learning about and learning to be worked well in a relatively stable world, in a world of constant flux, we need to embrace a theory of learning to become. Where most theories of learning see becoming as a transitional state toward becoming something, we want to suggest that the 21st century requires us to think of learning as a practice of becoming over and over again to embrace change and focus on becoming as central and persistent elements of learning.

The *Guide* espouses intentional learning in saying that learners should become "agents of their own learning," "aware of the powerful role they plan in their own learning." They should become "reflective practitioners of well-researched pedagogies in their use of space to support learning" (4).

The Learning Spaces Collaboratory (accessed October 24, 2014, http://www.pkallsc.org/) hosts meetings, workshops, Webinars, and publications relating to learning spaces. Jeanne Narum leads the Learning Spaces Collaboratory and is perhaps the longest serving and single most powerful influence in North America on the design of learning spaces. She began in the 1990s with Project Kaleidoscope, concerned with effective teaching and learning in the sciences, technology, engineering, and mathematics.

25. Representative works are Kenneth A. Bruffee, *Collaborative Learning: Higher Education, Interdependence, and the Authority of Knowledge,* 2nd ed. (Baltimore, MD: Johns Hopkins University Press, 1998); John Seely Brown, "Learning in the Digital Age," in *The Internet and the University: 2001 Forum,* ed. Maureen Devlin, Richard Larson, and Joel Meyerson (Boulder, CO: EDUCAUSE, 2002), 65–91, accessed October 24, 2014, http://net.educause.

edu/ir/library/pdf/ffpiu015.pdf; Joan K. Lippincott, "Learning Spaces Involving Faculty to Improve Pedagogy," *EDUCAUSE Review* 44, 2 (March 2009): 17–23; and Phillip D. Long and Stephen C. Ehrmann, "Future of the Learning Space: Breaking Out of the Box," *EDUCAUSE Review* 40, 4 (August 2005): 42–58.

26. Students affirm that common spaces in academic buildings are distinctively important to their success in learning; see "Learning Behaviors and Learning Spaces," 776–77.

27. Nate Kreuter comments, "In fact, this cognitive model of how colleges and students relate to one another, that of a business selling to customer, is currently so deeply rooted in how we see and discuss higher education that it can be difficult to even imagine other frames or metaphors for the relationship between educators and those who access that education." See "Customer Mentality," *Inside Higher Ed,* February 27, 2014, accessed October 24, 2014, http://www.insidehighered.com/views/2014/02/27/essay-critiques-how-student-customer-idea-erodes-key-values-higher-education.

28. Happily there have been a handful of exceptions ably reported by Brett B. Bodemer, "They CAN and They SHOULD: Undergraduates Providing Peer Reference and Instruction," *College & Research Libraries* 75, 2 (2014): 162–78. For a systematic use of peer coaching and its integration into the design of library space, see Ellen Schendel, Julie A. Garrison, Patrick Johnson, and Lee Van Orsdel, "Making Noise in the Library: Designing a Student Learning Environment to Support a Liberal Education," in *Books and Contributions to Books,* Paper 4 (2013), accessed October 24, 2014, http://scholarworks.gvsu.edu/library_books/4.

29. The argument here focuses on how we shape our relationship—our presence—*with* students. Just as important is how we shape relationships *among* the professional staff who are present in library learning spaces. For one account of how powerful such collaboration might be, see James K. Elmborg and Sheril Hook, *Centers for Learning: Writing Centers and Libraries in Collaboration* (Chicago: Association of College and Research Libraries [ACRL], 2005).

30. The literature on intentional learning (also referred to as *metacognition, self-regulated learning,* and *autonomous learning*) is particularly relevant to library planning. There is a voluminous professional literature on intentional learning, including a major scholarly journal titled *Intentional Learning.* The concerns of the K–12 community predominate in this literature, but there is a substantial body of writing about postsecondary education. Douglas J. Hacker, John Dunlosky, Arthur Graesser, eds., *Metacognition in Educational Theory and Practice* (Mahwah, NJ: Erlbaum, 1998) is an excellent point of entry for this literature. For a useful review of the literature on the impact of intentional learning in postsecondary education, see Melinda S. Burchard and Peter Swerdzewski, "Learning Effectiveness of a Strategic Learning Course," *Journal of College Reading and Learning* 40, 1 (2009): 15–16. In their *New Culture of Learning,* Thomas and Brown offer a compelling account of how a college course involving conventional lectures became an exemplar of intentional learning (23–25). The National Survey of Student Engagement (accessed October 24, 2014, http://nsse.iub.edu/) has for more than a decade provided leadership in understanding effective educational practice.

31. For guidance on assessment, see the Learning Space Toolkit and the Learning Spaces Collaboratory's 2013 *Guide;* see also Megan Oakleaf, *The Value of Academic Libraries: A Comprehensive Research Review and Report* (Chicago: ACRL, 2010).

32. The Ryan C. Harris Learning Teaching Center at the University of Dayton in Ohio is an especially fine exemplar of such agencies; see https://www.udayton.edu/ltc/ (accessed October 24, 2014).

33. Remarkably, the reference and instruction librarians at the Pew Library, Grand Valley State University, have fundamentally reconceived their service function by taking classroom faculty, rather than students, as their primary constituency. In doing this, they define their work in terms of their impact on learning (not in terms of what they do); they see their professional responsibilities as rooted in pedagogy and the university's learning mission.