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Designing a Law Library to Encourage Learning

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Designing a Law Library to Encourage Learning

Lee F. Peoples

I. Introduction

The traditional notion of what an academic law library should look like has been disrupted by a combination of factors. Shifting accreditation requirements, library collections that are increasingly digital and changes in legal education have coalesced to transform conventional thinking about library design. Those who engage in academic law library construction or remodeling projects are explorers charting a course into new territory. As one architect put it, "every library that embarks on a building program is in a sense on its own. While there is a long tradition to draw upon there is no agreed-on paradigm for the library of the future."[1]

This article will introduce the concept of designing library space to encourage learning. Designing-for-learning has been used by university libraries over the past decade. Law libraries have yet to explore this concept. This article focuses on applying designing-for-learning to library spaces. But the theory could easily be applied to all law school physical facilities.

II. A Contemporary History of Law Library Design

The accreditation requirements of the Association of American Law Schools and the American Bar Association have been a dominant factor in academic law library design over the last 100 years. AALS and ABA requirements imposed quantitative standards on the number of volumes that a law library must contain and the physical features of study space for most of the last century.[2] After minimum volume count requirements were dropped from its accreditation standards, the ABA began collecting data on the number of

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1. Craig W. Hartman, Memory Place, Place of Refuge, Coney Island of the Mind: The Evolving Roles of the Library in the Late 20th Century, 17 Res. Strategies 107, 112 (2000).

2. For a complete historical account of these requirements, see Glen-Peter Ahlers, Sr., The History of Law School Libraries in the United States: From Laboratory to Cyberspace (William S. Hein & Co. 2002).

print titles and volumes held by approved law school libraries in its annual questionnaire. This information was consolidated and distributed to law libraries in "take off" reports and also appeared in "America's Best Graduate Schools" in *U.S. News & World Report* and in *Baron's Guide to Law Schools*. The collection and dissemination of this information began in 1974 and continued until title and volume count were removed from the questionnaire in 2009.[3]

The imposition of quantitative volume count requirements and the collection of title and volume statistics have been described as the "'golden age' of academic law libraries."[4] During this era, the size of a library's print collection was "almost the sole criteria for judging the quality of a library."[5] It is no surprise that shelving space for a large and ever expanding print collection was a high priority in libraries designed during this golden age. Most academic law libraries contained multiple copies of federal and state reporters, statutes from all 50 states and extensive collections of secondary resources. In this pre-computer era, duplication of materials was desirable and required by AALS Executive Committee regulations.[6]

A driving factor behind library design decisions during this golden age was compliance with quantitative accreditation requirements. This approach was also appropriate for the state of legal education and legal information during the golden age. An important function of libraries during this era was the housing and care of large print collections. Traditional library seating for students was appropriate and adequate for this phase of legal education. Large classes using the Socratic Method were the norm. Collaboration and experiential learning in smaller groups had not yet been embraced by law schools. The extensive amount of teaching performed by today's law librarians was unheard of at that time. Silence in nearly all areas of the academic law library was preferred and talking was only permitted near the circulation and reference areas. Food and drink were banished for fear that they might damage the extensive print collections.

Over the last 20 years, these quantitative requirements were replaced with more flexible qualitative standards. The ABA and AALS no longer require law libraries to contain a specific number of print volumes or seats. Instead,

3. *Id*. at 139.

4. Taylor Fitchett et al., Law Library Budgets in Hard Times, 103 Law Libr. J. 91, 93 (2011). In contrast, one of the main themes of Professor Barbara Bintliff's remarks during a recent AALS program was a refutation of the idea that the golden age of law libraries has passed. Bintliff argued that the growing number of legal research databases, complexity of faculty research needs and the move toward experiential learning in law schools make this era the golden age of law libraries. Barbara A. Bintliff, Joseph C. Hutcheson Professor in Law and Dir. of the Tarlton Law Library/Jamail Ctr. for Legal Research at the Univ. of Tex. at Austin Sch. of Law, Association of American Law Schools Annual Meeting, Section of Law Libraries and Legal Information: Law Libraries of the 21st Century: Butterflies, Phoenixes, or the Same Old Thing? Jan. 7, 2013.

5. Fitchett et al. *supra* note 4, at 94.

6. Ahlers, *supra* note 2, at 81.

libraries are required to have collections that meet the needs of a school's curriculum and the research needs of students and faculty, among other considerations.[7] Law libraries must have adequate facilities for the program of legal education and "sufficient seating to meet the needs of the law school's students and faculty."[8] The ABA Council on Legal Education is currently considering a revision to the standards that would move the requirement of providing adequate space for study, research and group work from the law library to the law school.[9] These developments give law libraries more flexibility in allocating space within the library.

During the past two decades the amount of primary and secondary legal sources available in electronic formats has increased dramatically.[10] Law librarians have led efforts to make online legal information more reliable and to ensure that print and electronic legal information is preserved.[11]

7. ABA Standards and Rules of Procedure for Approval of Law Sch. ch. 6 Standards 605-606 (2012-13); Assn. of Am. Law Sch. Bylaws, § 6-8 (2013).

8. ABA Standards and Rules of Procedure for Approval of Law Sch. ch. 7 Standard 702, Interpretation 702-1 (2012-13).

9. *See* ABA Section of Legal Educ. and Admissions to the Bar Standards Review Comm., Drafts for Consideration at Committee Meetings: Meeting Date: November 16-17, 2012: Meeting Materials, *available at* http://www.americanbar.org/content/dam/aba/migrated/2011_build/legal_education/committees/standards_review_documents/July2012/2012_nov_src_meeting_materials.authcheckdam.pdf.

10. *See* Penny A. Hazelton, How Much of Your Print Collection is Really on WESTLAW and LEXIS-NEXIS?, 18 Legal Reference Servs. Q. no. 1, 1999, at 3 (finding that 13 percent of academic law library print materials are replicated in databases accessible on Westlaw and LexisNexis); *But see* Michael Chiorazzi, Books, Bytes, Bricks, and Bodies: Thinking About Collection Use in Academic Law Libraries, 21 Legal Reference Servs. Q. no. 2-3, 2002, at 1 (responding to Hazelton by arguing that law libraries can reduce the size of their print collections because 90 percent of the materials used for legal research are available in 10 percent of the materials available online); Gordon Russell, Re-Engineering the Law Library Resources Today for Tomorrow's Users: A Response to "How Much of Your Print Collection is Really on WESTLAW or LEXIS-NEXIS?," 21 Legal Reference Servs. Q. no. 2-3, 2002 at 29 (disagreeing with Hazelton in light of massive digitization projects that occurred after her article was published and other technological advances); Elizabeth R. Breakstone, Now How Much of Your Print Collection is Really Online? An Analysis of the Overlap of Print and Digital Holdings at the University of Oregon Law Library, 29 Legal Reference Servs. Q. 255, 261-262 (2010)(updating Hazelton's study to find that 36 percent of the law library's print materials were available online). The percentage of print materials available online is likely to increase in the future as Google Books, Hathi Trust, LLMC and others move forward with digitization projects.

11. A recent example is the Uniform Electronic Legal Materials Act (UELMA). This uniform law requires a state that publishes official versions of its legal information in electronic format to authenticate, preserve, and ensure permanent public access to this information. The UELMA was drafted in response to a request from the American Association of Law Libraries. Barbara Bintliff, The Uniform Electronic Legal Material Act is Ready for Legislative Action, Voxpopulii (Oct. 15, 2011, 3:12 PM), *available at* http://blog.law.cornell.edu/voxpop/tag/uelma/. UELMA has been adopted as law by California and Colorado and is currently pending in five state legislatures. Am. Assn. of Law Libraries,

Accreditation standards have become more flexible and no longer explicitly require that specific titles be maintained in print format. The current standards allow libraries to provide access to their collections through "ownership or reliable access."[12] The ABA's Interpretation of the standard provides that "the appropriate mixture of collection formats depends on needs of the library and its clientele."[13]

Many law libraries have reduced the size of their print collections in response to these developments and patron preferences for using materials in electronic formats.[14] Print materials also available in electronic databases are routinely stored in remote storage facilities, donated or discarded. The increasing flexibility of accreditation standards combined with the downsizing of print law library collections has freed up space inside the law library.

This newly created space is frequently commandeered by law school administrators eager to place non-library functions in library space. Academic law librarians frequently find themselves defending the library's need for square footage.[15] Law school deans, university administrators and presidents and board of trustee members often question the library's need for space.

UELMA Resources, *available at* http://www.aallnet.org/Documents/Government-Relations/UELMA/.

12. ABA Standards and Rules of Procedure for Approval of Law Sch, ch. 6 Standard 606 (b) (2012-13). A currently pending revision to this Standard explicitly states, "The law library shall provide a core collection of essential materials through ownership or reliable access." *See* ABA Section of Legal Educ. and Admissions to the Bar Standards Review Comm., *supra* note 9. If fully implemented, this revision will clarify confusion over whether the core collection must be provided in print format. *See* Memorandum from ALL-SIS Task Force on ABA Standards Review to Elizabeth Adelman, ALL-SIS Chair (Sept. 14, 2009), *available at* http://www.aallnet.org/sis/allsis/committees/abastandardstaskforce/allsisabastandardstaskforcefinal.pdf.

13. ABA Standards and Rules of Procedure for Approval of Law Sch., ch. 6 Standard 606, Interpretation 606-2 (2012-13). A currently pending revision to this standard provides additional clarification on the appropriate choice of format. *See* ABA Section of Legal Educ. and Admissions to the Bar Standards Review Comm., *supra* note 9.

14. The University of Baltimore discarded approximately two-thirds of its print collection before moving into a new law library. This decision was reached because of "continuous budget cuts, rising subscription costs and increasing demand for more study/social space from students." E-mail from Clement Lau, Univ. of Balt. Law Library to ALCTS discussion on library as place, Jan. 14, 2013 (copy on file with author).

15. For an elegant argument against the re-purposing of library space see Looking Beyond the Stacks: The Law Library as Place, 14 AALL Spectrum, July 2010 at 16, 18, in which Stephen Young explains how law library space plays an important role in the development and fostering of institutional loyalty among students. Alumni often "refer to their desks or their study spots within the library." When library space is converted into other uses, administrators "are in effect chipping away at the students' memories, their loyalty and potentially their willingness to donate to the institution. The repurposing of law library space for other law school needs, while perhaps cost effective in the short-term, may therefore have long term consequences that are detrimental to the law school's bottom line." This theory is discussed in more detail in Section V, *infra*.

Some mistakenly believe that all law is available online and view libraries as "dinosaurs clearly on their way to extinction in the new electronic age."[16]

An entire genre of literature has developed around providing advice to librarians grappling with these existential questions.[17] Lectures and discussions at professional conferences routinely focus on tactics for defending library space. At a symposium at Duke Law School in 2008, the school's Library Director Dick Danner noted that moments before his talk on "The Twenty-First Century Law Library" was scheduled to begin, he was approached by an audience member who asked, "Why do we have law libraries anymore?"[18] During the most recent ABA Bricks and Bytes Conference, Law Library Director and Professor Gail Daily began her talk titled, "Where is the Library?" with a frank discussion of how law librarians have defended the need for library space in recent years.

Flexible accreditation requirements and the explosion of online legal information have the potential to dramatically change the physical environment of the academic law library. Perhaps the time has come for a new approach to law library space planning.

III. Designing Libraries to Encourage Learning

Yale University Librarian Emeritus Scott Bennett first introduced the concept of a library designed to encourage learning in an article published in 2003 titled Libraries Designed for Learning. Bennett described two fundamental changes that occurred in higher education in the 1990s.[19] The first was the acknowledgement and adoption of the social dimensions of learning by colleges and universities. This included the adoption of active learning practices, students working more collaboratively and faculty incorporating experiential learning into the classroom. The second fundamental change was the information technology revolution and the corresponding move by libraries to provide more materials in electronic format and to move physical collections to off-site storage. It is a fair assessment to say that legal education and law libraries have similarly been shaped by the forces that Bennett describes.

Bennett began his research in this area by surveying library directors and chief academic officers at colleges and universities to understand the motivations driving library construction and renovation projects. He found that planning efforts for these projects focused primarily on library operations and that only a minority of projects involved any assessment of student learning or

16. Thomas R. French, Law Librarians and Library Design, Construction, and Renovation: An Annotated Bibliography and Review of the Literature, 98 Law Libr. J. 99, 106 (2006).

17. *Id.*

18. Richard A. Danner et al., The Twenty-First Century Law Library, 101 Law Libr. J. 143, 143 (2009).

19. Scott Bennett, Libraries Designed for Learning 3 (Council on Library and Information Resources 2003).

faculty teaching behaviors.[20] Bennett argued that this is the wrong approach. He proposed that design choices about library operations be guided by an understanding of student learning and faculty teaching. "To ask first about the amount of the space that is needed is to start wrong. Instead, questions about the nature of the educational experience [that is desired]—about quality and the nature of the learning community—are questions that must be asked first and asked persistently throughout the [planning] process."[21]

Bennett's scholarship has focused on the ability of library and other campus space to impact learning. His work in this area builds upon earlier scholarship associated with the founder of the campus ecology movement, James H. Banning. Banning first articulated his theory that the physical environment can be used to foster student development in 1986.[22] Banning contended that "the physical environment can contribute to a college student's development in two important ways. First, the features of the physical environment can encourage or discourage the process of development. Second, the process of designing the physical environment can promote the acquisition of skills at the core of student development."[23]

Building upon these theories, Bennett argued that campus spaces outside the classroom can have an impact on student learning. He stopped short of claiming that library space has a causal relationship with learning. Instead, Bennett adopted a probabilistic view, "where design features make certain behaviors likely."[24] "Space that allows students to manage the social dimensions of learning, that domesticates the foundational character of knowledge …. and celebrates the communal character of knowledge will indeed foster learning."[25] Library space, and all physical facilities on campus, should be designed to encourage the "specific learning behaviors the institution wants to foster."[26]

A law library that engages in the process of designing library space to encourage learning will be in a better position to respond to critiques of

20. Scott Bennett, Righting the Balance, *in* Library as Place: Rethinking Roles, Rethinking Space 11 (Council on Library and Information Resources 2005).

21. *Id*. at 13.

22. James H. Banning & Manuel R. Canard, The Physical Environment Supports Student Development, 4 The Campus Ecologist, no. 1, 1986. *See also* Winfred Gallagher, The Power of Place: How Our Surroundings Shape Our Thoughts, Emotions, and Actions (Harper Perennial 2007).

23. James H. Banning & C. Strange, Educating by Design: Creating Campus Environments that Work 31 (Jossey-Bass 2001). Banning's work draws from several architectural theories including determinism (there is a direct link between the built environment and behavior within it), possibilism (the physical environment is a "source of opportunities that may set limits on, but not restrict, behavior"), and probabilism (certain behaviors have probable links to the built environment). *Id*. at 13-15.

24. Bennett, *supra* note 20, at 22.

25. *Id*.

26. Scott Bennett, Learning Behaviors and Learning Spaces, 11 Portal: Libr. and the Acad. 765, 786 (2011).

the law library's need for physical space. In designing libraries for learning, space planners should view campus spaces as valuable assets that should be supporting learning.[27] The value that a university receives from its campus space assets can be measured in terms of how well these spaces support the learning behaviors that the institution has determined to advance. A law library that is purposefully designed to encourage important learning behaviors becomes a valuable asset essential to achieving an institution's underlying mission.

A. Applying Designing-for-Learning to Law Libraries

Several aspects of Bennett's theories are relevant to law libraries and legal education and should be seriously considered by law schools engaged in renovation or building projects. Designing libraries for learning could be useful in answering the existential questions facing academic law libraries. Designing-for-learning can be used by law schools to ensure compliance with ABA standards, to facilitate the specific type of learning called for in a national report critiquing legal education and to turn library space into a valuable asset that is critical to a law school's educational mission.[28]

The ABA standards acknowledge the role that physical facilities have on student learning by setting a minimum requirement. The standards do not require schools to have facilities that encourage learning. They define inadequate physical facilities as "those that have a negative and material effect on the education students receive."[29] The language acknowledges that physical space can have an impact on a student's education. Law school facilities that are carefully designed to encourage learning will at a minimum meet the ABA's threshold of not having a negative and material effect on students' education. Law libraries that are planned and constructed using the designing-for-learning approach will exceed the minimum threshold requirement and

27. *Id*. This is not bad advice considering that annual spending on academic library construction and renovation routinely approaches the half-billion-dollar mark in the United States. Bennett, *supra* note. 20, at 10. The average cost per square foot of academic library construction is $280. Christopher Stewart, The Academic Library Building in the Digital Age: A Study of Construction, Planning, and Design of New Library Space 35 (ACRL 2010).

28. William M. Sullivan, Anne Colby, Judith Welch Wegner, Lloyd Bond & Lee S. Shulman, Educating Lawyers: Preparation for the Profession of Law (Jossey-Bass 2007).

29. ABA Standards and Rules of Procedure for Approval of Law Sch. ch. 7 Standard 701, Interpretation 701-1 (2012-13). A currently proposed revision to chapter 7 of the standards would delete this interpretation and add the following language to Standard 701(b): "A law school is not in compliance with the standards if its facilities, equipment, technology or technology support have a negative and material effect on the school's ability: (i) to operate in compliance with the standards; or (ii) to carry out its program of legal education." *Supra* note 9. The explanation provided for this change is that the language of Interpretation 701-1 presented interpretation problems. ABA Section of Legal Educ. and Admissions to the Bar Standards Review Comm., Chapter 7: Explanation of Changes, November 30, 2012, *available at* http://www.americanbar.org/groups/legal_education/about_us/leadership/council_meetings.html.

become valuable assets that are critical to the achievement of institutional goals.

The designing-for-learning approach can be used to transform law libraries into physical spaces that play an important role in a law school's efforts to embrace reforms outlined in the Carnegie Foundation's *Educating Lawyers* report.[30] The report was critical of the traditional pedagogy and curriculum used by most law schools. The report called on law schools to make a number of reforms including integrating experiential and skills-based learning into the curriculum and improving assessment measures.

Law librarians were unhappy to discover that libraries and legal research were not mentioned in the Carnegie report. After release of the report, law librarians published articles criticizing this "glaring omission" and describing legal research instructional programs and other library efforts to advance reforms recommended in the report.[31] The use of library space to achieve the reforms called for by the Carnegie report is an intriguing concept that has yet to be mentioned in the literature.

The Carnegie report specifically mentions the use of "intentional learning" in lawyering classes offered at some schools as a means to improve pedagogy and assessment.[32] Intentional learning is defined as a "set of educational practices that help students become self-conscious and self-directed in their own learning. Teaching for intentional learning aims explicitly at enabling students to become aware of what they are doing as they learn the law."[33] Students engaged in this type of learning become "metacognitive" and are able to focus and regulate their learning, use time efficiently, practice new skills and ultimately become lifelong learners.[34]

The report calls for the comprehensive adoption of intentional learning that reaches beyond the teaching practices of individual faculty members and is embraced by the entire law school. It calls this "institutional intentionality"

30. Sullivan et al., *supra* note 28.

31. Leslie A. Street, Finding the Middle Ground in Collection Development: How Academic Law Libraries can Shape Their Collections in Response to the Call for More Practice-Oriented Legal Education, 102 Law Libr. J. 399 (2010); David L. Armond & Shawn G. Nevers, The Practitioners' Council: Connecting Legal Research Instruction and Current Legal Research Practice, 103 Law Libr. J. 575 (2011); Duncan Alford, The Development of the Skills Curriculum in Law Schools: Lessons for Directors of Academic Law Libraries, 28 Legal Reference Services Q. 301 (2009); Vicenç Feliú & Helen Frazer, Embedded Librarians: Teaching Legal Research as a Lawyering Skill, 61 J. Legal Educ. 540, 559 (2012).

32. Sullivan et al., *supra* note 28, at 179. *See* Roy Stuckey, Teaching With Purpose: Defining and Achieving Desired Outcomes in Clinical Law Courses, 13 Clinical L. Rev. 807, 823 (2007) (describing intentional learning as the "kind of teaching [that] adds an important dimension to the usual aims of law school classes. Such pedagogy pays direct attention to student learning through devices such as making goals explicit, coaching toward these goals and formative assessment linked to them.").

33. Sullivan et al., *supra* note 28, at 180.

34. *Id*.

and cites the work of Gregory Munro as an example. Munro contends that intentional learning in law will only succeed in a "consciously crafted educational environment" where the law school "becomes intentional about its own aims, educational processes and identity."[35] The school needs to have an articulated mission that "identifies the functions that the law school should serve and then devise[s] an alignment of teaching methods, outcomes and assessment procedures in light of these functions."[36]

Bennett's space planning theories can be utilized by law schools to achieve the physical manifestation of the "consciously crafted educational environment" that encourages intentional learning. In "Learning Behaviors and Learning Spaces," Bennett discusses the results of a survey he conducted at six higher education institutions. His approach embraces the importance of intentional learning. His research began by identifying 12 learning behaviors that manifest intentional learning. Ten of these behaviors are taken from questions appearing on the National Survey of Student Engagement. Seven of these ten questions also appear on the Law Student Survey of Student Engagement. Bennett's use of questions from the survey makes his work easily adaptable to legal education.

Bennett developed a survey instrument containing three groups of questions. The first group of questions asked students and faculty members to rank the importance of the 12 intentional learning behaviors. The results revealed little agreement about the importance of the 12 behaviors among students and faculty respondents. As a result, Bennett recommends that institutions should begin space planning activities by first understanding the different views of students and faculty about learning behaviors and seek "to develop an institutional view of the learning behaviors that are critically important to the campus mission."[37]

The second group of questions asked respondents to identify how well their campuses provided spaces that foster intentional learning behaviors. The data received in response to this group of questions revealed "considerable uncertainty about how often students and faculty respondents see their space as . . . serving to foster the intentional learning behaviors that are most important to them."[38]

The final group of questions asked participants to identify spaces they found to be supportive of intentional learning behaviors. In response to these questions, "students and faculty respondents most frequently regarded libraries as fostering learning behaviors important to them."[39] Law librarians

35. *Id*. at 182.

36. *Id*.

37. Bennett, *supra* note 26, at 770.

38. *Id*. at 772.

39. *Id*. at 776.

eager to help their institutions implement intentional learning called for in the Carnegie report should find these results encouraging.

A law school could implement the designing-for-learning approach in a variety of ways. Schools contemplating a renovation or construction project could administer the survey questions to students and faculty. A version of these questions with slight modification to make them relevant to the author's institution is included below:

1. How important to your success as a student is the learning behavior of working with classmates outside of class to prepare for class, complete class assignments or to study for final exams?

2. How important to your success as a student is the learning behavior of studying alone outside of class?

3. How important to your success as a student is the learning behavior of studying alone but in proximity to other students who are also working alone?

4. How important to your success as a student is the learning behavior of discussing ideas from readings or classes with other students outside of class?

5. How important to your success as a student is discussing ideas from your readings or classes with faculty members or librarians outside of class?

6. How important to your success as a student is discussing the law, your career or related topics with students, librarians, or faculty members outside of class?

7. How important to your success as a student is working with a faculty member or librarian outside of class on a research project, paper, or other activity?

For each of these questions, respondents select the following response: not important, somewhat important, important or very important. Respondents who select not important are asked about the next learning behavior on the list. Respondents who select either somewhat important, important, or very important are asked to identify spaces in the law school that will foster the specific learning behavior. The spaces include: reading table, study carrel, soft seating, corridor, hallway or elevator, grand reading room, study room, learning commons, café or coffee shop, or outdoor space. Respondents may select more than one of these spaces as fostering the specific learning behavior in question.

Law schools who participate in the survey of law student engagement could easily identify learning behaviors important to their students by reviewing responses to the survey that correspond with Bennett's list of intentional learning behaviors. The downfall of this approach is that it only reveals learning behaviors important to students and does not account for faculty

opinions. Law schools should not rely on data in this survey to engage in major space planning decisions without first surveying the faculty and developing an institutional consensus on important intentional learning behaviors.

A set of law library specific questions was recently vetted for inclusion in the 2013 survey of law student engagement.[40] One question relates to library facilities and asks students to rank their satisfaction with the library as study space and with collaborative space availability. Another question explores legal research competencies. It asks students to evaluate how much their law school experience has contributed to their knowledge of "the cost of research," their "ability to critically evaluate" information and their ability to "understand the contexts for legal issue[s]."[41] Many of the abilities this question evaluates are traits of intentional learning as discussed in the Carnegie report. These questions will help law libraries and law schools further identify specific traits of intentional learning and think about how space planning could encourage the development of these traits.

Once consensus on ideal learning behaviors is identified, a law school could use this information to make routine adjustments to space allocation or to modify rules on food and noise. If a high level of support was identified for Learning Behavior 1—working with classmates outside of class to prepare for class, complete class assignments or study for final exams—the law school or law library might want to increase the amount of space available for collaborative work, add more large study rooms or increase the space in the library where talking is permitted. If a high level of support was identified for Learning Behavior 2—studying alone outside of class—the law school or law library might want to designate some areas for silent study or increase the number of study carrels. A law school might want to design more spaces for "planned collisions"[42] if high levels of support are identified for Learning Behavior 5—discussing ideas from your readings or classes with faculty members or librarians outside of class—or Learning Behavior 6—discussing the law, your career or related topics with students, librarians or faculty members outside of class.

Law schools wishing to fully integrate Bennett's model into their space planning process could administer the three sets of survey questions to students and faculty.[43] The law school should attempt to reach an institutional consensus on which learning behaviors are most important and which spaces encourage these behaviors by reviewing the survey results. Law schools that have firmly committed to achieving a design that encourages learning should

40. Posting of Gordon Russell, gordon.russell@lmunet.edu, to LAWLIBDIR-L@lawlib.wuacc.edu, Feb. 11, 2013 (on file with author).

41. *Id.*

42. This term refers to unplanned interactions occurring between faculty, students or others. Planned collisions are discussed in more detail *infra*.

43. An alternative or hybrid approach would be to administer the six questions Bennett discusses in his article, First Questions for Designing Higher Education Learning Spaces, 33 J. Acad. Librarianship 14 (2006).

take care throughout the planning process to guard against operational concerns taking precedence over designing-for-learning.[44]

A law school that fully integrated Bennett's model into the space planning process could hope to achieve "a powerful three-way connection in planning between institutional learning goals, observable learning behaviors and space design."[45] Bennett boils the essential question facing space planners down to "the alignment between institutional mission and institutional resources."[46] This position is analogous with Munro's work cited in the Carnegie report in which he calls on schools to have an articulated mission that "identifies the functions that the law school should serve and then devise[s] an alignment of teaching methods, outcomes and assessment procedures in light of these functions."[47] Law schools that integrate Bennett's methodology into their space planning activities can move closer toward Munro's "consciously crafted educational environment" where the law school "becomes intentional about its own aims, educational processes and identity."[48]

The designing-for-learning model has not yet been integrated into the traditional academic library space planning literature. The 900-page *Planning Academic and Research Library Buildings* by Leighton and Weber assumes that space planners understand an "institution's mission and objectives [and] can determine the nature of space that should be provided" and only briefly touches on the relationship between academic objectives and space planning.[49]

The seminal work on law library space planning by Stephen Margeton does not discuss designing-for-learning. However, designing-for-learning could be integrated into the needs assessment phase of the space planning process as outlined by Margeton. The purpose of the needs assessment is to "uncover all of the library's physical shortcomings and demonstrate how these defects affect the library's ability to achieve its goals and objectives."[50] If a library's stated goals and objectives included encouraging learning, a needs assessment could be used to make a case for new or improved library facilities if the current facilities did not encourage learning. Surveying faculty and students to reach consensus on important learning behaviors and the spaces that foster those behaviors would be appropriate during the needs-assessment phase described in Margeton's book.

44. Bennett's research reveals that operational concerns frequently win out over design for learning concerns in libraries. Bennett, *supra* note 20.

45. Bennett, *supra* note 26, at 783.

46. *Id*.

47. Sullivan et al., *supra* note 28, at 181.

48. *Id*. at 182.

49. Bennett, *supra* note 19, at 1.

50. Stephen G. Margeton, Introduction to Design for Law and Other Academic Libraries: Reflection and Change 18 (2nd ed., William S. Hein 2007).

IV. Designing Spaces that Encourage Learning

Once consensus about learning behaviors and spaces that foster those behaviors has been reached, the law school can proceed to design a physical environment that encourages learning. Research and previous experience have uncovered common traits of spaces that encourage learning. Architects and librarians who wish to design for learning should incorporate these traits into their plans.

A. Balancing Social and Communal Spaces

Library space that acknowledges the social dimension of learning can contribute to learning.[51] Ethnographic studies of library use have demonstrated that "well designed social spaces are likely to increase student motivation and may have impact on ability to learn."[52]

The concept of socializing in the library may seem contradictory to the traditional role of libraries as monastic areas providing ample space for quiet study. The communal function of libraries was eloquently described by Sam Demas as "the unique pleasure of being alone, in a quiet place, while simultaneously being in a public place associated with scholarship."[53] Libraries must be careful not to let the social model undermine a highly valued trait of academic libraries, "the communal nature of quiet, serious study."[54] Studies have revealed that up to 80 percent of library users visit the library because they want to study alone.[55]

Library space planning must carefully balance the social aspects of learning with the communal function of providing space for quiet study. Bennett urges libraries to give preference toward "learning functions in the space's mix of academic and social functions."[56] Successful library space planning allows students to control the social and communal aspects of studying and will facilitate learning.[57] Libraries can use a variety of methods to balance these competing traits.

51. Bennett, *supra* note 20, at 17.

52. JISC, Designing Spaces for Effective Learning: A Guide to 21st Century Learning Space Design 28 (2006), *available at* http://www.jisc.ac.uk/media/documents/publications/learningspaces.pdf.

53. Sam Demas, From the Ashes of Alexandria: What's Happening in the College Library?, *in* Library as Place: Rethinking Roles, Rethinking Space, at 29 (Council on Library and Information Resources 2005).

54. Jeffery T. Gayton, Academic Libraries: "Social" or "Communal?" The Nature and Future of Academic Libraries, 34 J. of Academic Librarianship 60 (2007). According to Gayton, "the trick for academic libraries is to create inviting communal spaces for study and research without falling into the trap of making the library a social gathering place."

55. Susan Gardner & Susanna Eng, What Students Want: Generation Y and the Changing Function of the Academic Library, 5 Portal: Libraries and the Academy 405, 408 (2005).

56. Bennett, *supra* note 20, at 17.

57. *Id*.

Library space should be allocated for a variety of uses including silent study, collaborative study and socializing. A set of clearly defined rules outlining which type of behavior is permitted in specific areas of the library can help achieve this objective.[58] Carefully crafted rules are useless if they are ignored by students or not enforced by library staff. Different types of furniture can be used to encourage or discourage specific behaviors. For example, individual study carrels encourage silent solitary study while large tables and soft seating areas encourage collaboration and socializing.

While libraries must maintain a distinction between studying and socializing, the social dimension of study should not be denied. Large study tables with ample seating can be combined with rules allowing quiet discussion to encourage students to study alongside each other. This common practice is an important behavior that encourages learning.[59] This type of activity has been described as "studying along" and is included in Bennett's inventory of 12 active learning behaviors.[60] Studying along fosters a sense of community among students which is another important trait of a learning environment.[61]

Libraries should "permit territorial claims for study that enable students to govern the social dimension of their study space."[62] Students should be given control over their environments to vary the level of social or communal activity they prefer. Several law libraries distribute small laminated signs to students during orientation. Students use the signs to signal to others in the law library that they do not wish to be disturbed.[63] Tables and chairs on casters that are easily movable encourage students to stake out their own space in the library.

The Bogle and Gates Law Student Lounge at the University of Washington's Gallagher Law Library empowers students to govern the social dimension of their study space. The lounge is cordoned off by opaque glass walls and doors which serve to visually connect students on either side while controlling noise and limiting access to law students only. Students can freely move in and out of the lounge to suit their preference for social or communal activity.

Movable walls that students can use to reconfigure study spaces to suit their needs are a useful tool in governing the social dimension of study space. The library at Indiana University-Purdue University Indianapolis had a positive

58. Some research has revealed that a "tacit code of etiquette governs behavior" in library space devoted to social learning. *See* Joanna Bryant, Graham Matthews & Graham Walton, Academic Libraries and Social Learning Space: A Case Study of Loughborough University Library, UK, 41 J. Librarianship and Info. Sci. 15 (2009). Law libraries are best served by having clearly articulated and well-enforced rules.

59. Bennett, *supra* note 26, at 786.

60. Bennett, *supra* note 43, at 19. Question 3 of the law specific questions asks students and faculty how important studying along is.

61. *Id*.

62. Bennett, *supra* note 20, at 17.

63. Law libraries at Columbia University, Oklahoma City University, and the University of Georgia have distributed these types of signs.

experience with movable walled study areas.[64] Adequate soundproofing of fixed or movable walls that separate a social space from a communal space is essential. Library stacks can also be used to absorb sound between quiet and noisy library spaces.

B. Space that Encourages Collaborative Learning

Collaboration emerged as a significant trend in legal education over the last decade. Collaboration is an important aspect of the integration of experiential learning called for in the Carnegie report. Lawyers today find themselves working in increasingly collaborative environments.[65] Collaborative learning can be viewed as an important component of the social aspect of learning discussed above. To foster intentional learning, facilities should provide spaces for "active, collaborative, inquiry-based learning."[66] The amount of space in undergraduate libraries devoted to group study and library classrooms has increased significantly in recent years.[67] First-year law students will arrive at the law library with an expectation of working in these collaborative spaces. Law school space planners should design spaces to encourage collaboration.

Architect Steven Foote categorizes the "rapidly growing requirements for collaborative learning space" as the "sleeping giant among the trends driving academic library design."[68] Foote contends that collaborative learning space is the "ultimate question" in library space design, more important than traditional questions concerning information use. Foote has identified several concepts to encourage collaborative learning in library design. An overarching concept that Foote recommends is "encouraging a sense among readers that they 'own' the library space they use."[69] This concept is not unlike Bennett's idea of permitting territorial claims over study space discussed above.

Law schools can apply this concept to study rooms. Study rooms are traditionally thought of as spaces for student collaboration. Law schools can encourage students to feel ownership of study room space by enabling them to reserve these rooms in advance. White boards are traditionally provided in study rooms to encourage collaboration. The recent invention of paint that can turn an entire wall into a chalkboard or whiteboard can expand this concept even further. Another recent trend is the use of glass walls in study rooms as writing surfaces.

64. Rachel Applegate, The Library Is for Studying: Student Preferences for Study Space, 35 J. Acad. Librarianship 341, 345 (2009).

65. Catherine Gage O'Grady, Preparing Students for the Profession: Clinical Education, Collaborative Pedagogy, and the Realities of Practice for the New Lawyer, 4 Clinical L. Rev. 485, 494 (1998).

66. Bennett, *supra* note 19, at 5.

67. Stewart, *supra* note 27, at 64-66.

68. Scott Bennett, The Choice for Learning, 32 J. Acad. Librarianship 3, 12 (2006).

69. *Id*. at 13.

Large flat screen monitors are now relatively inexpensive and can be added to study rooms to allow students to collaborate on documents. Furniture vendors have devised group work stations that simultaneously display the video outputs of multiple laptop computers on a single large flat screen monitor.[70] These work stations allow students to collaborate when drafting outlines or working on group projects. A less-expensive version can be created using a flat-screen monitor and a video "splitter."[71] Any study room equipped with a flat-screen monitor should also include cameras and microphones for videoconferencing.[72]

The cost and size of high-quality video projection devices have dramatically decreased in recent years. Manufacturers have begun selling mobile devices with built-in projectors. In early 2012, one manufacturer released a smartphone equipped with an internal 15-lumen projector capable of projecting a 50-inch wide image.[73] Law school space planners with an eye to the future should provide ample amounts of white wall space for collaborations involving projected images.[74]

Foote recommends filling collaborative space with tables and other furniture designed for group work.[75] Law schools can embrace this concept by equipping study rooms with furniture on casters that can be easily moved to remake an environment. Furniture companies are now producing soft seating specifically designed to allow students to have casual discussions while using laptop computers.[76] Foote also recommends consideration of the "acoustical needs of spaces that change with use."[77] Collaborative work tends to be noisier than traditional studying. Libraries should ensure that study rooms and other collaborative spaces have adequate soundproofing.

Collaboration and creativity can be encouraged by including features of "low road" structures into spaces within the law school environment. Low road spaces allow occupants to remake and customize the space to fit their needs.

70. Media:scape, Steelcase.com, *available at* http://www.steelcase.com/en/products/category/educational/technology-visual/mediascape/pages/overview.aspx.

71. Lee Peoples, VGA and HDMI Splitters now Available for use in the Study Rooms, The Gavel, Mar. 28, 2012, *available at* http://law.okcu.edu/?p=22907.

72. Study rooms equipped with cameras and microphones could be used for a variety of purposes including collaborating with other students, participating in distance education courses and for job interviews.

73. Ginny Mies, First Look: Samsung's Galaxy Beam Android Phone with a Built-In Projector, PCWorld, *available at* http://www.pcworld.com/article/250706/first_look_samsungs_galaxy_beam_android_phone_with_a_built_in_projector.html.

74. Specialty paint has been developed that improves the performance of ordinary walls as projection screen surfaces. *See* Paint on Screen, *available at* https://www.paintonscreen.com/.

75. Bennett, *supra* note 68, at 13.

76. The KI "Teacup" chair is one example. *See* http://www.ki.com/products/category/seating/tablet-arm-chairs/tea-cup-lounge-tablet-arm-chair/.

77. Bennett, *supra* note 68, at 13.

The classic example of a low road structure is M.I.T.'s Radiation Laboratory building, also known as "Building 20." Building 20 was quickly and cheaply erected during World War II as a center for radar research. It has since become "widely regarded as one of the most creative spaces in the world" and has produced the Bose Corporation, the first video game, and Chomskyan linguistics.[78] Scientists who worked in Building 20 tore down walls without permission and bolted equipment to the roof. The scientists working on the first atomic clock ripped out two floors to accommodate a three-story metal cylinder.

Although it might be hard to imagine a law school permitting students to remove floors or tear down walls, low road concepts can be implemented in law school space planning. Study rooms can easily embody low road concepts through the use of walls covered in white board paint, movable walls and adjustable furniture. Giving students control over light and climate by installing dimmers and thermostats in study rooms are relatively inexpensive ways to give law students the sense that they own their study space. Highly collaborative and adaptable spaces could be useful to the growing number of law schools offering courses where students build legal technology applications.[79]

1. Collaboration at the Reference Desk

Collaborative learning can be encouraged by adopting a new conception of providing reference services in a law library. Traditionally, law library reference desks are designed to have "visual massiveness" that separates the student from the librarian.[80] This design reinforces the librarian's authority over knowledge and reduces the student to merely an information consumer. This traditional design does not encourage collaboration in learning between the librarian and the student.

There are numerous examples of law libraries that have adopted innovative approaches to providing reference service in an environment that encourages collaboration. Several law schools have installed "knowledge bars" adjacent to classroom space and inside library space. These counter-height desks provide a space for faculty and librarians to have impromptu or scheduled interactions with students.[81] Some law libraries have promoted collaboration by stationing reference librarians in non-traditional locations. The Oklahoma City

78. Jonah Lehrer, Groupthink: The Brainstorming Myth, The New Yorker, Jan. 30, 2012, at 22, 27. For more on low road structures, see Stewart Brand, How Buildings Learn: What Happens After They're Built 24-33 (Penguin Books 1994).

79. Karen Sloan, Legal Education Goes High-Tech: Georgetown Students Devise Computer Applications That Dispense Legal Guidance, Nat'l L. J., June 4, 2012; Apps for Justice Wins Future Ed Contest, *available at* http://www.kentlaw.iit.edu/news/2011/apps-for-justice-wins-future-ed-contest.

80. Bennett, *supra* note 68, at 13.

81. Law schools with knowledge bars include North Carolina Central, the University of Phoenix School of Law, and Florida Coastal School of Law.

University Law Library has several mobile reference desks located throughout its law library that are staffed by reference librarians and law student reference assistants. One desk is located near a large concentration of faculty offices. These mobile desks facilitate collaboration by bringing librarians to faculty and students instead of forcing these patrons to seek out librarians. The number of reference transactions increased 275 percent after mobile reference desks were installed.[82]

Other law libraries have experimented with desk-less reference services. Librarians armed with tablet devices provide roving reference service or station themselves in soft seating areas to casually interact with students and faculty.[83] Law libraries are also experimenting with embedding librarians into clinics;[84] librarians are stationed in the clinical environment during class time or are available for student consultations during set times each week. At another law school, reference librarians' offices are located near groups of faculty offices and study rooms.[85]

Another interesting concept for encouraging collaboration is the use of "touchdown suites." These suites are used for collaboration between students, librarians and faculty members at the Welch Medical Library at Johns Hopkins University. Touchdown suites include "a work station designed for collaboration (including video conferencing) and lounge furniture for small meetings and consultations."[86] Touchdown suites do not belong to any particular member of the academic community but can be used by students, librarians and faculty members. Because the suites are not the exclusive domain of the librarians, they help encourage collaboration.

2. Encouraging Collaboration through Planned Collisions

A law school that desires to foster the social aspects of learning to promote collaboration will also attempt to design "planned collisions" into its space program. A planned collision occurs when students, faculty or administrators experience chance encounters with each other. These encounters are not

82. Reference Services, 2011-12 Annual Report: Oklahoma City University School of Law Library, *available at* http://law.okcu.libguides.com/annualreport11-12.

83. Roving reference began in law firm libraries and has been adopted by some law school libraries. An informal survey of academic law library websites in November, 2012, revealed that a handful have begun roving reference programs. The schools include Arizona State University, Florida Coastal, Drake, University of Washington, and John Marshall. There are likely more law school libraries engaging in roving reference. For example, librarians at the author's institution have been providing roving reference service since 2011 but the service is not mentioned on the library's website.

84. Vicenc Feliu & Helen Fraiser, Embedded Librarians: Teaching Legal Research as a Lawyering Skill, 61 J. of Legal Edu., 540-559 (2012).

85. E-mail from Gordon Russell, Assoc. Dean, Lincoln Mem'l Univ., Duncan Sch. of Law, to Lee Peoples, Dir. of the Law Library and Professor, Okla. City Univ. Sch. of Law, Nov. 16, 2012 (copy on file with author).

86. Bennett, *supra* note 68, at 15.

coincidental but are purposefully created through conscious design decisions. Planned collisions between law school community members who might not otherwise run into each other can lead to discussions about one another's work. These conversations can create "knowledge spillovers."[87] Examples of knowledge spillovers include a student gaining a unique perspective on a legal issue from a faculty member or a librarian mentioning a newly published book relevant to a professor's research agenda.

Planned collisions have been utilized in other settings. Steve Jobs included the concept in plans for Pixar's headquarters. The building was initially built around a central atrium "so that Pixar's diverse staff of artists, writers, and computer scientists would run into each other more often."[88] Jobs later moved all mailboxes, meeting rooms, cafeteria, coffee bar, gift shop and restrooms to the central area of the building. Jobs believed the best meetings happened by chance and purposely designed the building to force people to run into one another. One Pixar director commented, "[Y]ou know what? He [Jobs] was right. I get more done having a cup of coffee and striking up a conversation or walking to the bathroom and running into unexpected people than I do sitting at my desk."[89] Space planners in the sciences have taken notice of this concept. The most recent "generation of laboratory architecture has tried to make chance encounters more likely to take place."[90]

Many law schools may already be creating planned collisions without making a conscious effort to do so. The trend over the past decade has been for library space to be converted to other uses at many law schools. Locating various law school functions in space formerly occupied by the library may cause new groups of people to interact. For example, planned collisions will occur when faculty members occupying offices created from reclaimed library space interact with students studying at tables near the new offices.

Law school space planners can design for planned collisions by carefully locating popular gathering places like cafes or coffee bars in strategic locations. Planned collisions can be encouraged if these amenities are placed in neutral spaces that are not the exclusive domain of any member of the law school community. Law school space planners should be attentive to the location of spaces that will naturally draw people, like comfortable soft seating with ample natural light or commanding views. These desirable spaces can be used to create planned collisions and should be placed in neutral locations away from spaces traditionally occupied exclusively by a single cohort of the law school community. Associate Law Librarian Jonathan Franklin has described how the University of Washington used printers "like honey" to draw law

87. Lehrer, *supra* note 78, at 27.

88. *Id*. at 26.

89. *Id*.

90. *Id*. at 25. Research into the effect of physical proximity has revealed that the most cited co-authored scientific papers were those produced by scientists working within ten meters of one another.

students toward particular parts of the law library.[91] Space planners should consider strategically locating printers to create planned collisions between diverse members of the law school community.

C. Domestication of Library Space to Foster Learning

Library space can foster intentional learning by encouraging discussion of class content outside the classroom. This specific behavior was included in Bennett's list of intentional learning behaviors. In a separate study, Bennett discovered that the most frequent venue for the discussion of course content outside of class was "domestic space."[92] Domestic spaces typically include campus residence halls, coffee shops and bars.

Are there particular aspects of domestic spaces that can be incorporated into libraries to encourage discussion of class content that leads to learning? To understand this question Bennett examined the traits of various campus spaces including classrooms, faculty offices and libraries. He found that these spaces traditionally underscore the authority of the faculty member or librarian and "reinforce inequalities of authority in knowing."[93] In these spaces students are more likely to subordinate themselves to the faculty member rather than express themselves. In contrast, domestic spaces "affirm a non-foundational view that holds knowledge to be a community project" rather than the property of a professor or librarian. Domestic space makes it possible for students to "manage inequalities of authority (which of course often still exist) in ways that at least partly neutralize them."[94]

Not surprisingly, food and drink are important components of domestic spaces. Cafes and coffee bars are extremely popular at law schools and their libraries. Law schools interested in encouraging learning should view food service amenities not as ends in and of themselves but as means to domesticate space and create community among faculty and students.[95] Bennett's research revealed that students were extremely attracted to domesticated public spaces where food was shared between faculty and students. Common traits of these public spaces include a comfortable environment without limits on students or faculty being themselves and spaces where spontaneity is encouraged.[96]

91. Jonathan Franklin, Assoc. Law Librarian, Gallagher Law Library, Univ. of Wash. Sch. of Law, Remarks at the American Bar Association 2010 Bricks, Bytes, and Continuous Renovation: Law School Facilities Conference, Student-Centric Spaces (Mar. 11, 2010).

92. Bennett, *supra* note 20, at 18.

93. *Id*. at 19.

94. *Id*.

95. *Id*. at 20.

96. *Id*. at 21.

D. The Learning Commons

Information commons have made a "sudden, dramatic and widespread" appearance in libraries and are viewed as a principle means of defining space as library space.[97] Their inclusion in a library construction or renovation project has become a foregone conclusion in recent years. One recent annotated bibliography on law library design prominently placed the discussion of library commons under a section titled "To Build or Not to Build" and argued that the information commons provided the "locus for the library as place."[98]

Law schools engaged in space planning to encourage learning should carefully consider the incorporation of commons space into a library. Various terms have been used to describe the commons including information, media, teaching, technology—and most significantly for this inquiry—learning. These common spaces trace their roots to the "long heritage of common rooms in higher education, where all members of the academic community can meet informally around shared interests, especially after meals."[99] Is there any distinction to be made between these spaces other than a linguistic one?

The most prevalent commons in academic law libraries is the information commons. An information commons has been defined as "a cluster of network access points and associated IT tools situated in the context of physical, digital, human and social resources organized in support of learning."[100] Information commons bring together computers, librarians, and technologists in an informal environment. The purpose of the information commons is to "support learning."[101] The core activity that occurs in the information commons is the "manipulation and mastery of information."[102]

In contrast, the goal of a learning commons is to "bring people together around shared learning tasks." Its core activity "would not be the manipulation and mastery of information" "but the collaborative learning by which students turn information into knowledge and sometimes into wisdom."[103] The fundamental difference between the information and learning commons, according to Bennett, is that the former supports the institutional mission while the latter enacts it.

A law school that has decided to focus its space planning activities on encouraging learning should incorporate a learning commons into library space. If planned and constructed successfully, a learning commons can

97. Scott Bennett, The Information or the Learning Commons: Which Will We Have, 34 J. Acad. Librarianship 183, 183 (2008).

98. French, *supra* note 16, at 106.

99. Bennett, *supra* note 19, at 37.

100. Bennett, *supra* note 97, at 183.

101. *Id.*

102. Bennett, *supra* note 19, at 38.

103. *Id.*

become "the single most powerful spatial expression of the educational role of the library."[104]

There are several key components of a learning commons. The learning commons should be located inside the library to take advantage of the print, electronic and human resources of the library. This will allow the use of these resources to become central to the learning that occurs in the commons.

A learning commons will be most effective if it is owned by the learners, not by the librarians or faculty members. A learning commons should not be confused with classrooms located inside a library or teaching computer labs.[105] In those traditional spaces, the teacher or librarian and not the student is in control. This aspect of a learning commons is similar to the concept of domesticating library space discussed above.

The learning commons should support collaboration and be built around the "social dimensions of learning."[106] The commons should include features of domestic spaces to assist students in managing inequalities of authority as discussed above. A carefully planned café space adjacent to or inside of a learning commons will help domesticate the space.

Only a loose set of rules should govern the scheduling and use of the commons and what is and is not permitted inside the commons. Because of the variety of activities that might take place in a learning commons, it should not be located adjacent to any silent study areas.

A "genuine planning partnership" involving students, librarians and faculty members should be used to design the commons.[107] The focus should be on how to design a space that encourages intentional learning behaviors. Care should be taken to avoid the typical patterns of viewing students as information consumers, faculty as the power brokers and librarians as the owners of the space. This "co-design" has been applied to design learning commons in libraries at California Polytechnic State University at San Luis Obispo, San Jose State University and Dalhousie University, to name a few.[108]

104. *Id*.

105. An interesting and recently constructed example of a classroom placed inside an academic law library is found at Thomas Jefferson School of Law in San Diego. The "Learning Center" features a large teaching desk at the front of the area with a group of chairs positioned immediately in front of the desk. During a library tour it was explained that this configuration can be used for small group instruction. Immediately behind the chairs are two tables with approximately ten chairs each. This configuration allows the space to be used for larger legal research and writing instruction inside the library. Although this type of space is a valuable addition to any law library, it should not be confused with a learning commons. The use of the Learning Center at Thomas Jefferson is scheduled by the library. A learning commons is typically available for any use by any member of the academic community on a first-come, first-serve basis.

106. Bennett, *supra* note 19, at 38.

107. *Id*. at 40.

108. Mary M. Somerville & Lydia Collins, Collaborative Design: A Learner-Centered Library Planning Approach, 26 The Electronic Library 803 (2008).

The uses of the commons will "vary greatly and change frequently."[109] The space should be highly adaptive. One library director interviewed by Bennett remarked that during the planning process for a commons at his institution, the architects considered open space with furniture that could be arranged to suit various needs. "Projects could happen in that space and then go away—almost like an academic playground."[110]

A law school should carefully assess the technology preferences and habits of their current and future students when designing a commons area. A few short years ago the literature on commons areas in law schools was dominated by the idea of placing desktop computer work stations inside the areas. While some workstations containing desktop computers will always be desirable, the vast majority of today's law students will enter the commons carrying their own tablet or laptop computer. These students might prefer a "bring your own device" work station that allows them to work from their own tablet or laptop.

Looking toward the future, law schools should plan commons areas to accommodate a rapid increase in the use of mobile computing devices including iPads, iPhones, and other tablet devices. Many technologists predict that tablets or smartphones will replace laptop computers in coming years.[111] Bring-your-own areas should allow students to dock and charge a variety of mobile devices while displaying content on large monitors.

Commons areas should provide adequate and comfortable seating and desk space for students, librarians, faculty members and other collaborators to work using devices of their choice. To encourage a learning commons to be used in a variety of ways, furniture should be on casters. Ample power adapters and strong WiFi networks support the use of mobile devices. The space and all furnishings that go inside a commons should be flexible and adaptable in anticipation of new technology. For example, several prototype smart phones have the ability to become virtual desktop computers by projecting a virtual keyboard onto a tabletop as well as a high resolution image onto a nearby wall.

The Florida State University Law Research Center is in the process of creating a learning commons in a space that formerly housed book stacks.[112] It will provide space for student collaboration and will feature a technology-rich modular classroom. The learning commons will also include a bring-your-own area where students can connect their personal laptops and mobile devices to monitors and power.

The learning commons will be an open and approachable space with glass walls. Activities that take place there will be highly visible to other students

109. Bennett, *supra* note 19, at 38.

110. *Id.*

111. Jeff Bertolucci, Smartphone Sales Boom—Who Needs a Laptop? PCWorld, *available at* http://www.pcworld.com/article/249313/smartphone_sales_boom_who_needs_a_laptop_.html.

112. Telephone Interview with Elizabeth Farrell, Assoc. Dir., Fla. State Coll. of Law Library (December 3, 2012).

to entice them to participate. Campus architects are working to create a space that maintains open sight lines while keeping noise from spilling over into quiet areas in the library. When the commons is not being used to teach legal research, law students will be allowed to use the space however they want.

The Oklahoma City University Law Library will include a learning commons when the law school moves to its new location in a renovated historical building in downtown Oklahoma City.[113] Plans call for the learning commons to be prominently located on the first floor of the building. Several amenities are strategically placed near the commons to draw students in and create planned collisions with faculty and librarians. Student lockers, refrigerators, microwaves, showers and a lactation room are all adjacent to the commons. The commons is centered around a large café surrounded by various types of seating designed to encourage collaboration. Seating includes "data diner booths" with flat screen monitors and connections for laptops and mobile devices.[114] Although the space is located partly below ground, it will be filled with abundant natural light from five-stories-high glass-walled light shafts.[115] Patrons will also be drawn into the commons to access the library's study aids and casual reading collections located inside the commons.

The commons will be a busy social space where students engage with each other, librarians, faculty, technologists and academic support. The learning commons is adjacent to a computer lab and student technology help desk. The commons will include a mobile reference desk and bar-height laptop desk with large flat-screen monitors for collaboration between students, librarians, faculty and academic support.

Casual discussions that begin in the noisy commons space might lead to quieter study or collaboration in several adjacent glass-walled rooms. An open-concept library classroom is also located near the commons. It will be used for legal research and other skills instruction. When not used as a classroom, it will be available for student use as a large study room. All furniture in the study and collaboration rooms and the library classroom is on casters and can be easily moved.

As these examples illustrate, a carefully designed learning commons can be used to encourage intentional learning and promote collaboration in a law school.

113. OCU Trustees Approve Law School Move to Downtown (Oct. 24, 2012), *available at* http://law.okcu.edu/?page_id=29371.

114. This concept was adapted from the David B. Weigle Information Commons at the University of Pennsylvania, *available at* http://wic.library.upenn.edu/wicfacilities/datadiner.html.

115. Numerous studies have demonstrated a strong student preference for natural light and an aversion to fluorescent light. *See* Didem Kan Kilic & Deniz Hasirci, Daylighting Concepts for University Libraries and Their Influences on Users' Satisfaction, 37 J. Acad, Librarianship 471-479 (2011); Heather V. Cunningham & Susanne Tabur, Learning Space Attributes: Reflections on Academic Library Design and Use, 1 J. of Learning Spaces (2012), *available at* http://www.partnershipsjournal.org/index.php/jls/article/view/392/287.

E. Reconciling the Third Place with Designing-for-Learning

A library designed for learning shares many similarities with a library designed as a "third place." One of the leading theories in modern law library space planning is the concept of the third place. Stephen Young applied the third place theory to law libraries in a 2010 article titled, "Looking Beyond the Stacks: The Law Library as Place."[116] Third places are distinguishable from first places, like home, and second places, like work environments. Many of the defining traits of law libraries as third places are also important traits of libraries designed to encourage learning.

Third places are "neutral gathering places" and "leveling environment[s]" where students are "safe in the knowledge that they are not going to be judged or graded."[117] Third places embody a "homey almost cozy feeling created by the right use of lighting, colors and furniture."[118] These concepts are similar to the designing-for-learning concept of domesticating library space to help students "manage the inequalities of authority."

Law libraries designed as third places include "purpose-built spaces that encourage sociability" and are designed to achieve the right balance between public and private spaces. Well-designed social spaces "allow students to move seamlessly between knowledge acquisition and learning interaction, all within a sociable, communal environment."[119] This aspect of the law library as third place is equivalent to components of a library designed for learning that allow students to manage the social and communal aspects of learning.

A library designed as a third place most likely would not contain a traditional classroom. Traditional classrooms typically are viewed as workspaces or even adversarial environments, like second places, by students. The placement of a classroom in the library might dilute the third place qualities of the law library. This concept is in line with the view of including a learning commons, as distinct from a traditional classroom, in a library designed for learning. A well-designed learning commons would be a collaborative space "owned" by learners that accommodates tasks defined by students, not a space controlled by teachers or librarians similar to a traditional classroom.

Although a library designed as a third place and a library designed for learning share many similarities, there is an important distinction. The underlying goal of a library designed for learning ultimately is to encourage learning. Traditional space planning considerations of library functions are subordinate to design features that encourage learning. Library-as-the-third-place concepts that did not also encourage learning would yield to concepts

116. 14 AALL Spectrum 16-21 (2010). Dick Danner first mentioned the concept of designing a law library as the third place during his remarks at the American Bar Association Bricks, Bytes, and Continuous Renovation conference on March 23, 2006, during the program, "Paradigms Lost: Thinking about Library Space in an Evolving Information Environment."

117. *Id*. at 17.

118. *Id*. at 19.

119. *Id*.

that encouraged learning. In contrast, the goal of designing a library as a third place is to include specific design characteristics that create the third place. In applying the third place concept, Young views the law library as "far more than just a place where students learn," suggesting that learning attributes might be forced to yield to design elements of a third place.[120]

The changing nature of legal education, legal information or the generational characteristics of law students might cause future divergence in the types of spaces that encourage learning and spaces that create the third place. A law library engaged in space planning with the goal of encouraging learning and creating "the third place" should be designed for flexibility to accommodate any future divergence.[121] For the time being, the two theories share more common traits than distinguishable ones.

Designing a law library to encourage learning can yield numerous benefits beyond the stated goal of encouraging learning. A law school that embraces this approach can move closer to achieving reforms called for in the Carnegie report and ensure compliance with accreditation standards. While these benefits are highly desirable, the physical improvements needed to achieve them are costly.[122]

V. Using Library Space to Increase Revenue

Declining enrollment, shrinking endowments, cuts to state funding and other factors have combined to create a bleak financial picture for most law schools.[123] These harsh realities have caused many law schools to sharply curtail spending and in some instances to offer faculty and staff members early retirement packages.[124] Tight financial times have caused some law schools to delay or cancel building projects.[125] Delaying infrastructure improvements

120. *Id*. at 18.

121. Flexibility is a highly desirable feature of any law school building project for a variety of reasons. Stephen Margeton devoted an entire chapter of his seminal work, Introduction to Design for Law and Other Academic Libraries: Reflection and Change, to a discussion of expansion plans and designing for flexibility, *supra* note 50.

122. *See* Stewart, *supra* note 27 (reporting the average cost per square foot of academic library construction to be $280). The University of California School of Law at Berkeley recently paid just over $900 per square foot to expand its law library; Louise Schaper, An Airy Light Box for Legal Minds, Library Journal, (June 28, 2012), *available at* http://lj.libraryjournal.com/2012/06/buildings/national-landmark-academic-library-2-berkeley-law-library-university-of-california-berkeley/#_.

123. Ethan Bronner, Law Schools' Applications Fall as Costs Rise and Jobs Are Cut, N.Y. Times, Jan. 30, 2013, at A1.

124. Paul Campos, Vermont Law School to Start Buying Out Faculty Next Month, Inside the Law School Scam (Jan. 23, 2013), *available at* http://insidethelawschoolscam.blogspot.com/2013/01/vermont-law-school-to-start-buying-out.html.

125. Sam Schaefer, Lack of Funding Delays Law School Construction at Carolina North, The Daily Tar Heel (Aug. 29, 2012), *available at* http://www.dailytarheel.com/article/2012/07/lack_of_funding_delays_law_school_construction.

might seem prudent in the short term but could have negative consequences in the long run.

Colleges and universities spent $2.4 billion on library construction between 2003 and 2009.[126] A number of these institutions have created "country club" campuses over the last 15 years with heavy investments in amenities like "climbing walls, swank student unions and luxury dorms."[127] Law school applicants expect to see high quality physical facilities when they visit prospective law schools.

A recent survey conducted by the Law School Admissions Council asked law school applicants to rank how much influence various kinds of information had on their decisions to apply to a specific school. Applicants ranked the campus visit as the most influential factor in determining which schools they wanted to attend.[128] During a campus visit, a law school with facilities that are in need of improvement will not compare favorably with a law school that has invested in high-quality spaces. Law schools anxious to attract applicants from an increasingly smaller national pool should not ignore the importance of physical facilities.

High-quality physical spaces are important for attracting students but also play a significant role in encouraging students to become benefactors once they graduate.[129] The library has a significant role to play in developing institutional loyalty among students. A carefully designed library is "an important component in the creation of social capital in a law school."[130]

Many students develop strong attachments to their law schools because of the experiences they had in their schools' law libraries. Students typically do not develop warm feelings for classrooms or faculty offices. Many students associate these spaces with fear and anxiety. In contrast, students are often sentimental for their favorite table, carrel or study spot in the library. The library is the place where students begin to interact with their contemporaries as professional colleagues.[131] Many lifelong friendships begin in the law

126. Stewart, *supra* note 27 at 34.

127. Scott Carlson, What's the Payoff for the "Country Club" College, Chronicle of Higher Education, Jan. 28, 2013, *available at* http://chronicle.com/blogs/buildings/whats-the-payoff-for-the-country-club-college/32477.

128. LSAC Law School Applicant Study, December 2012. Fifty-three percent of respondents rated the open house a factor of 4 or 5 where 1 was little or no influence and 5 was strong influence. Fifty-two percent of respondents rated the law school tour a factor of 4 or 5.

129. This discussion is adapted from Young, *supra* note 15. *See also*, Blair Kauffman's remarks "[S]pending money renovating the library is a wise decision. We've seen evidence of this in the law schools that have invested in library building projects, where afterwards library usage is up more than ever." Danner et al., *supra* note 18, at 145.

130. Young, *supra* note 15, at 18.

131. The library spaces, rules that govern them, and educational programs that occur inside the library can be used to develop a student's professional identity.

library. Romances and even lifelong marriages have often begun with glances exchanged across a reading room.[132]

Law schools which invest in high-quality library spaces can enjoy returns on their investment by liquidating the social capital created by these spaces. Stephen Young thoughtfully described how expenditures on library facilities could be used to increase alumni giving. "The sense of community that is created translates into current and former students who feel a sense of attachment to the institution and who are often willing to help the school through personal or financial commitments."[133] Law schools seeking to increase revenue should not overlook the long-term benefit of investing in high-quality library spaces.

VI. Conclusion

Law librarians engaged in construction or renovation projects should consider designing library space to encourage learning. Applying this concept to law library design has benefits beyond simply increasing student learning. A law library designed for learning can be used to achieve reforms called for in the Carnegie report and to comply with accreditation standards. Library space becomes a valuable asset when it encourages learning behaviors deemed important by a law school. High quality library space can also be utilized to increase enrollment and encourage generous alumni support.

132. The author fondly recalls studying for the bar exam with his future wife at one particular table in the Oklahoma City University Law Library. Blair Kauffman, Law Librarian and Professor of Law at Yale Law School has shared a story about a letter the law library received from President Bill Clinton asking that a plaque be permanently installed on a particular table in the reading room of the Yale law library where President Clinton first saw his wife.

133. Young, *supra* note 15, at 18.