

Charting a Clear Course: A State of the Learning Commons

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“No one now plans an academic library without a learning commons.”¹

Libraries have been evolving their use of space over the past several decades. In particular, the introduction of information commons and learning commons spaces have become so widespread that if a library has not proactively introduced a learning commons, it would not be unexpected for campus administrators and other stakeholders to inquire about plans for them. Even given the widespread adoption of these spaces, there is not a standard set of practices that define them. This lack of clarity can lead to confusion when discussing these spaces and associated services with local stakeholders. This paper will review the literature to provide a state of learning commons practices and will discuss both standard and long tail spaces, services, and approaches that may be useful in institutional planning for academic libraries of all types.²

This review of the literature is composed of three main parts: a timeline and context for commons spaces in academic libraries; a discussion of learning common spaces, technologies, services, and practices;³ and an overview of some less common practices that may be of interest for specific local contexts depending on institutional needs.

Learning Commons in Context

Library spaces have been evolving for several decades. The early 1990s saw the introduction of what be recognizable today as the foundation for contemporary learning commons at the University of Iowa Library in Iowa City in 1992 and at the University of Southern California in Los Angeles in 1994.⁴ Throughout the 1990s, information commons spaces were created that introduced computing into reference and research spaces.⁵ Many people conceptualized information commons as extensions of the traditional library as an information repository, facilitating knowledge discovery in new and emerging formats.

This type of space continued to progress along with evolutions in higher education until there was a shift towards framing this type of place as “learning commons” spaces with a notably different service philosophy. This change began around the same time that pedagogical trends moved towards constructive learning environments in which learners build their own learning and away from information transfer.⁶ One clear change reflected in this trend was academic libraries repositioning themselves to facilitate community learning beyond primarily focusing on providing access to information.⁷ By 2003, many librarians noted a practical shift as well, in which new needs and services were required by users to meet their academic goals.⁸

The 2010s found a widespread adoption of a pedagogical emphasis on student led inquiry and collaborative learning.⁹ This model also meant a new emphasis for libraries, moving from providing resources and tools to providing an environment in which users could build knowledge and practice self-directed learning.¹⁰ This philosophical shift led to a new emphasis on thinking about these emerging spaces in terms of a “learning com-

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mons” rather than an “information commons.” Where banks of computers often characterized an information commons, in order to access to information, learning commons spaces were being developed to provide tools and services in order to enable knowledge production. In this new approach, students are thought of as ‘architects’ of their own learning goals and outcomes, and spaces are designed to provide resources, services, peer learners, and academic support from across the institution in order to help students reach their desired goals and outcomes.¹¹

This new way of thinking about commons spaces in libraries has meant that learning commons are not necessarily designed around an expert that students must seek behind a desk, but rather are conceived of as a user-centered space in partnership with those that would use it. Librarians and other stakeholders bring professional expertise to planning these spaces, and community users bring expertise about their lived experiences. Combined professional expertise and a strong grounding in user experiences can provide necessary content and context to create a space that can be transformational for the local community.

Most recently, collaboration has been increasingly recognized as a core competency of the 21st century, and higher education has embraced curricular and pedagogical approaches to enhance students’ collaborative practices.¹² Collaboration is recognized as a necessary competency, and learning commons spaces and services are often developed with a baseline assumption that collaboration will be central to the work within and of the space in a given learning commons, today.

When mapping out a long-term vision for a learning commons it is also useful to think about the context that is expected to be common in these spaces in the future. Increasing learning commons include campus cultural programming, exhibits, and extend into virtual spaces.^{13,14} Libraries also are experimenting with technology labs and sandboxes,¹⁵ providing spaces at the intersection of information, learning, and technologies in learning commons spaces or the library in general.

These recent transitions towards user-centered learning commons models and philosophies mirror those of higher education in general. As higher education shifts from instruction to learning, towards a more interdisciplinary approach, and is increasingly focused on competency and creation, learning commons spaces enable the campus to have a concrete place and service model helping students and faculty navigate this transition.¹⁶

The State of the Learning Commons

It is understood that learning commons spaces are richer environments than information commons spaces might have been, with a user-centered philosophy, productivity tools, and services designed to accelerate student learning. Though there is not a standard understanding of what is or is not part of a learning commons, there are some practices that have been adopted across many institution, and this section will explore those trends.

While many campus administrators would like the entire campus to be a learning space, it is unclear that most students and faculty see the campus in that way.¹⁷ A learning commons gives an institution the opportunity to intentionally design a learning space to meet community needs. It gives the institution an identifiable place to market to students for support and to encourage their productivity.

Intentionally designed learning commons spaces represent a strong institutional alignment. In pulling together services with similar aims and outcomes, service providers can offer a coordinated approach, simplify the process for students seeking these services, and demonstrate that the work of the library and other learning-centered units map to the larger institution’s mission, vision, values, and strategic priorities.¹⁸

Generally speaking, learning commons spaces are located within libraries. In higher education, these spaces are noted to often include services that extend beyond the library, and in fact, bring together a number of service providers.¹⁹ Writing Centers are common partners in these spaces. Academic technology support may exist in one form or another. Point-of-need partners may utilize the space at key times in the academic year, for example:

advising, career services, or eportfolio support may choose a few key weeks to raise awareness of their service or provide extended hours in a space that is known to be populated with students.

Learning commons spaces tend towards flexibility, with furniture that is movable, reconfigurable, and stackable. White boards are either mounted on the walls or are available to be moved around in the space. Technology tends to be integrated throughout the space. Learning commons spaces often offer both computers for students that do not bring one to campus and power and wireless for students that bring their own devices.

Learning commons spaces are often designed with an understanding of the importance of design and aesthetic, from lighting to sound to paint. Many institutions note that paint color and other choices give the space a tone that inspires the community to make use of it. Further, learning commons spaces tend to embrace students' desire for comfort that will encourage them through long studying sessions. Offering this may mean something as simple as comfortable furniture or something as complex as partnering with a café or food services to offer food along with relaxed food and drink policies.

Most interestingly, learning commons spaces are both a transformative environment for users as well as a powerful tool to demonstrate the library's connection to the work of the larger institution. With a firm grounding in campus documentation and initiatives, a learning commons can be uniquely positioned to help the larger institution meet its goals.²⁰ In planning for the space, service, and approach, it is wise to both note the larger institution's goals and desired outcomes.

Space Trends

Much of the literature addresses the implementation of learning commons spaces through the lens of facilities, and the creation of this type of space is often framed as part of a transition from *library as an information repository* to *library as a learning enterprise*. Overwhelmingly, learning commons spaces are conceived of as places of active engagement, social interaction, and physical comfort. Key indicators of engagement, interaction, and comfort include relaxed food policies as well as flexible designs and interactive options.²¹

Learning commons spaces are also typically created with a sense of designed aesthetic. Lighting, the influence of noise in the space, the density of furniture, available avenues for support, and signage all lead to a design that can enhance or detract from learning. Noise, in particular, can be a challenge as so many people associate libraries with quiet space while learning commons spaces inevitably become noisier.²²

It is worth noting that students repeatedly identify multiple space needs including individual silent spaces for study and reading, casual workspaces to fill time between classes, and collaborative meeting spaces for group work.^{23,24} A learning commons will be collaborative by nature, so it is wise to think about what other spaces students can access for their entire suite of needs.

When planning the space, it is important to match the design of the space to the learning goals or outcomes for your students. Collaboratively mapping out these goals and plans with other stakeholders and potential users will allow the vision of the learning commons to be co-created and the space to be more effective. Understanding local learning culture provides a strong foundation for this work. A campus that prioritizes group work will necessarily need more collaborative group workspaces. A campus that emphasizes digital literacy will need multimedia tools and services and associated technology infrastructure. Understanding the larger institution's mission, vision, and values will provide context for thinking about what to prioritize. With a firm grounding in institutional goals and user needs, a collaborative team can explore what to prioritize within the primary features of student-centered space: comfort, aesthetics, flow, equity, blending, affordances, and the potential for repurposing.²⁵

Another dimension of learning commons spaces to consider is space for formal and informal events, from small meetings to programs to large receptions and other occasions.²⁶ These spaces are common features in

learning commons spaces, though a community is not likely to think to ask for them if they do not already have experience with the library providing these types of spaces.

Technology Trends

Though there are cases of learning commons spaces that rely primarily on low-cost flexible furniture and shared service spaces, technology is frequently a key component of learning common spaces. Overwhelmingly the emphasis is that technology should be easy to use and not get in the way of the subject area learning that is taking place in these spaces.

Most learning commons spaces include computer workstations clusters that are intentionally designed with the philosophy of the space. Rather than rows of computers, these computing environments provide students with enough room to spread out their materials while working with the technology.²⁷ The varied approaches to technology in learning commons spaces include traditional technologies like desktops to newer tools such as tablets and multimedia recorders.²⁸ Learning commons spaces that are technology heavy tend to provide services as well, including consultations and workshops. This support may span from learning how to use the tools that are provided to helping users identify the most effective tools to use for their desired outcomes.

Understanding local community needs will help determine the technology program for the space. If the institution requires significant collaborative assignments, technology infused group workstations will enable students to work together on projects.²⁹ If an institution requires a number of multimedia projects, learning commons planning should include digital media support, from tools to training.

At this point, the literature indicates most learning commons spaces utilize a mix of library provided computers and a Bring Your Own Device model. The more flexible spaces require more mobile computing, but that does not preclude the library from circulating laptops. A heavier reliance on laptops also requires sufficient power and wireless internet throughout the space.

Another trend in learning commons is the introduction of makerspaces. Some learning commons are an entirely separate program from the library's makerspace, while others bring in pieces of equipment common to makerspaces or offer maker-inspired programming within the space.

Learning commons spaces should be designed so that there are services and mechanisms for students regardless of their level of technology expertise.³⁰ It may be especially important to view learning commons spaces as an ongoing experiment in order to adjust as local practices and needs change over time.³¹

Service Trends

There are a number of services that are common to learning commons collaborations. Reference is almost always a core service. Circulation and Reserves are often framed as either part of the learning commons or closely related.

Writing Centers are the most frequently listed service provider that is not typically part of the library's organizational structure. Writing support is a natural partner as both reference and writing consultation services are often tied to the same assignment. Both services support students throughout the assignment lifecycle, and both support classes and the curriculum through classroom visits and consultations.³²

Tutoring services also are included in a number of learning commons spaces, so that in addition to writing support, students can find help with math, science, and other disciplines. Co-locating academic support for courses can lead to study groups making use of the space and creates a place in which students can expect to find relevant workshops to support assignments with expertise from a number of relevant units.

Academic support extends to other areas as well. Technology is frequently cited as a relevant service to consider for a learning commons. Some learning commons spaces co-locate a campus help desk for general IT

needs. Other learning commons spaces focus on a deeper connection to the learning mission of the space, and partner with academic technology. This collaboration enables support for digital assignments and navigation within the campus Learning Management System.

A few specialized services that do not obviously tie to coursework appear in a number of learning commons spaces as well. Disability services is frequently cited, certainly benefiting a number of students. Career services is often mentioned as well, likely building on student expectations of learning commons spaces as places that provide relevant information for their goals and will help them succeed.

One area of service across many learning commons programs that may be a surprise to some libraries is support for faculty pedagogical development. Some learning commons spaces integrate innovative classroom designs to encourage faculty exploration. Some provide expertise and consultation for designing assignments and academic assessment. Others hold workshops and training to support faculty members' use of academic technology exploration and integration of new pedagogical models in general.³³

Beyond specific offices, there are a number of types of services that one can expect in learning commons spaces. Consultations, workshops, clinics, reading groups, tutorials, meet-ups, coaching for writing and presentations, and technology support to aid student learning may all exist within a given learning commons.³⁴ In many cases these spaces offer not just curricular support, but also workshops, events, and exhibits designed to expose the community to the intellectual and cultural output of the institution through showcasing student and faculty work.

Administrative Trends

Administratively speaking, learning commons models do not have a standard approach to administration. This is likely due to the local contexts and histories behind the units that come together to support student learning in these spaces. In some cases, the library manages all of the units in the space. In others, a few units report through the library while others do not. There are cases where the library is a coordinator of the space and related services though none of the units report through the library. It is not clear at this point whether any particular approach can be identified as the ideal model for most institutions, but rather that institutions have to identify what makes the most sense given their goals, their history, and the people available to participate in the work.

Regardless of the formal administrative structure, a deep collaborative relationship does appear to be necessary for success. Early work to establish a collaborative planning culture that is focused on learning is essential.³⁵ Similarly, it is worth noting that cross training appears again and again in the literature. Many institutions describe the learning commons as a cohesive unit in which all members can either help with or quickly refer any user need.³⁶

Implementation of the learning commons varies as well. Most learning commons spaces have a central service desk, though the design of the actual desk may be influenced by what is expected to happen there.³⁷ For example, in-depth research assistance may lend itself to a student sitting down and settling in. Quick stop support may lead to a standing desk, encouraging staff to step away to help someone or walk a user to the person that they need. In the best cases, services are fairly integrated. However it is worth noting that the literature does illustrate that without a firm grounding in collaboration and shared goals, services may physically reside in the same space but offer a disjointed user experience.

Services are often offered through a central desk, as mentioned above, or triaged through a central point staffed either by a full-time employee or trained student. A number of learning commons spaces experiment with roving student employees, to answer basic questions and to refer users to someone who can help with more complicated requests. Some learning commons spaces include consultation booths so that when a user has a more in-depth request they can get help in a somewhat private environment.

Regardless, it is worth noting that the literature repeatedly finds that in order to succeed the units offering services within the commons need to communicate well, share broad institutional knowledge, and share a commitment to the Learning Commons vision.^{38,39}

Longtail

When thinking about learning commons spaces and services, the importance of local context, the necessity to get students and stakeholders to help design the service and space, and what makes sense to implement for a given institution, it can be useful to think about edge cases.

There may be additional academic support that makes sense for a given institution. Grand Valley State University provides data management, analysis, and visualization support.⁴⁰ Georgia Tech offers presentation practice space with recording capabilities.⁴¹ The University of Guelph in Ontario offers support for English language learners through workshops and one-on-one consultations for writing, speaking, listening, and reading.⁴² Some learning commons spaces offer services that span curricular and social spheres. North Carolina State University's D. H. Hill Library includes gaming consoles in their learning commons⁴³ and a Creativity Studio in their new Hunt Library.⁴⁴ In each of these cases there is a clear local need that has been identified as potentially useful to students in a specific learning commons.

Conclusion

Though there is not a broadly adopted set of practices for learning commons spaces at this point in time, they have been widely adopted across many academic libraries. The exact implementation varies widely enough that it is risky to assume what the model looks like in any given institution. This paper reviewed the literature in order to provide a current state of the learning commons. This distillation should provide some general services and approaches that may be useful for most organizations, and could certainly be considered as part of institutional and strategic planning.

Many of the ideas identified within this paper are spreading throughout library spaces. Food, flexible and collaborative space, and integrated services are common philosophical approaches at many libraries, and not limited to learning commons spaces. As with learning commons spaces, most libraries take into account the physical, virtual, and cultural dynamics of their work.⁴⁵ In all of this, libraries and learning commons are seeking to pull together spaces, services, and resources so that when a user has a need, it can be met. In some ways the learning commons connects libraries to something people have long positively attributed to the institution: serendipity.⁴⁶

As we have seen throughout this paper, successful learning commons spaces involve intentional planning for space, services, and resources (both information and technology). Lessons learned from the design of these spaces may be useful in evolving the library and other spaces throughout a given campus.⁴⁷

In planning for the future, it is absolutely critical to include institutional priorities, learning goals, student learning behaviors, and space design.⁴⁸ With a strong grounding in this data, a collaborative process to build a vision, and a focus on keeping learning at the center of the discussion, libraries can design valuable learning commons spaces for their communities. These spaces can improve student learning, clearly map the work of the library to the mission of the larger institution, and can have a transformational impact on their institution, the users, and the larger community.

Notes

1. Scott Bennett, "Putting Learning into Library Planning," *portal: Libraries and the Academy* 15, no. 2 (2015): 215.
2. There is an active history of publishing on library spaces in general and learning commons spaces more specifically. With an

- exception of the context, this paper picks up after Rebecca M. Sullivan's excellent "Commons Knowledge: Learning Spaces in Academic Libraries," examining the literature since her 2010 review. This paper's bibliography includes additional core texts that provided context for this paper published before 2010.
3. Some practices emerge so often in the literature as to appear to be common knowledge, so you will note that citations in this paper point to sources for less frequently mentioned trends.
 4. Bennett, "Putting Learning into Library," 215.
 5. Geoffrey Little, "The Space Race," *The Journal of Academic Librarianship* 39, no. 4 (2013): 352.
 6. Richard A. Holmgren, "Learning Commons: A Learning-Centered Library Design," *College & Undergraduate Libraries* 17, no. 2–3 (2010): 177.
 7. Ibid.
 8. Jamie Seeholzer and Joseph A. Salem Jr., "The Learning Library: A Case Study of the Evolution From Information Commons to Learning Commons at Kent State University Libraries," *College & Undergraduate Libraries* 17, no. 2–3 (2010): 288.
 9. Rebecca M. Sullivan, "Commons Knowledge: Learning Spaces in Academic Libraries," *College & Undergraduate Libraries* 17, no. 2–3 (2010): 132.
 10. Elizabeth K. Heitsch and Robert P. Holley, "The Information and Learning Commons: Some Reflections," *New Review of Academic Librarianship* 17, no. 1 (2011): 65.
 11. Nancy E. Adams and James B. Young, "Users Learning from Users: Building a Learning Commons from the Ground Up at a New University," *College & Undergraduate Libraries* 17, no. 2–3 (2010): 150.
 12. Young S. Lee and Matthew A. Schottenfeld, "Collaborative Knowledge Creation in the Higher Education Academic Library," *Journal of Learning Spaces* 3, no. 1 (2014).
 13. Joan K. Lippencott, "Information Commons: Meeting Millennials' Needs," *Journal of Library Administration* 52, no. 6–7 (2012): 541.
 14. Donald Beagle, "The Emergent Information Commons: Philosophy, Models, and 21st Century Learning Paradigms," *Journal of Library Administration* 52, no. 6–7 (2012) 521.
 15. Little, "The Space Race," 352.
 16. Adams and Young, "Users Learning from Users," 19.
 17. Scott Bennett, "Learning Behaviors and Learning Spaces," *portal: Libraries and the Academy* 11, no. 3 (2011): 774.
 18. Susan McMullen, "US Academic Libraries: Today's learning commons Model," *PEB Exchange* 4 (2008): 1.
 19. Heitsch and Holley, "The Information and Learning Commons," 64.
 20. Sullivan, "Commons Knowledge: Learning Spaces," 131.
 21. Ibid. 130.
 22. Richard McKay, "Building a Learning Commons: Necessary Conditions for Success," *Community & Junior College Libraries* 20, no. 3–4 (2014): 107.
 23. Heitsch and Holley, "The Information and learning commons," 64.
 24. Caitlin P. DeClercq and Galen Cranz, "Moving Beyond Seating-centered Learning Environments: Opportunities and Challenges Identified in a POE of a Campus Library," *The Journal of Academic Librarianship* 40, no. 6 (2014): 579.
 25. "Seven Principles," *Spaces for Knowledge Generation*, accessed February 6, 2017, <http://www.skgproject.com/learning-spaces-tool-kit/design-principles/>.
 26. McMullen, "US Academic Libraries," 4.
 27. Ibid. 2.
 28. Heitsch and Holley, "The Information and Learning Commons," 64.
 29. Sullivan, "Common Knowledge: Learning Spaces," 141.
 30. Heitsch and Holley, "The Information and Learning Commons," 75.
 31. Sullivan, "Common Knowledge: Learning Spaces," 139.
 32. Elise Ferer, "Working Together: Library and Writing Center Collaboration," *Reference Services Review* 40, no. 4 (2010): 544.
 33. McMullen, "US Academic Libraries," 3.
 34. Elliot Felix, "Learning Space Service Design," *Journal of Learning Spaces* 1, no. 1 (2011).
 35. Bennett, "Putting Learning into Library," 227.
 36. Heitsch and Holley, "The Information and Learning Commons," 73.
 37. McMullen, "US Academic Libraries," 2.
 38. David B. Allen et al., "K-State's Distributed Learning Commons: Achieving Long-Term Sustainability Through Strategic Partnerships," *College & Undergraduate Libraries* 17, no. 2–3 (2010): 167.
 39. Heitsch and Holley, "The Information and Learning Commons," 74.
 40. "Knowledge Market," *Grand Valley State University*, accessed February 6, 2017, <http://www.gvsu.edu/library/km/>.
 41. "Presentation Practice Rooms," *Georgia Tech Library*, accessed February 6, 2017, <http://clough.gatech.edu/presentation.html>.
 42. "Guelph International," *University of Guelph*, accessed February 6, 2017, <https://www.uoguelph.ca/international/>.
 43. "Learning Commons (Hill)," *NCSU Libraries*, accessed February 6, 2017, <https://www.lib.ncsu.edu/spaces/hill-learning-commons>.
 44. "Explore Hunt Library Spaces," *NCSU Libraries*, accessed February 6, 2017, <https://www.lib.ncsu.edu/huntlibrary/explorespaces>.
 45. Heitsch and Holley, "The Information and Learning Commons," 66.

46. Megan Stark and Sue Samson, "Organized Spontaneity: The learning commons," *College & Undergraduate Libraries* 17, no. 2–3 (2010): 261.
47. DeClercq and Cranz, "Moving Beyond Seating-Centered Learning," 582.
48. Bennett, "Putting Learning into Library," 221.

Bibliography

- Adams, Nancy E. and James B. Young. "Users Learning from Users: Building a learning commons from the Ground Up at a New University." *College & Undergraduate Libraries* 17, no. 2–3 (2010): 149–159.
- Allen, David B., Rebecca A. Gould, Laurel A. Littrell, and Jane E. Schillie. "K-State's Distributed learning commons: Achieving Long-Term Sustainability Through Strategic Partnerships." *College & Undergraduate Libraries* 17, no. 2–3 (2010): 160–176.
- Bailey, D. Russell, and Barbara Gunter Tierney. *Transforming Library Service Through Information Commons: Case Studies for the Digital Age*. Chicago: ALA Editions, 2008.
- Beagle, Donald. "The Emergent Information Commons: Philosophy, Models, and 21st Century Learning Paradigms." *Journal of Library Administration* 52, no. 6–7 (2012) 518–537.
- . "Extending the Information Commons: From Instructional Testbed to Internet2." *The Journal of Academic Librarianship* 28, no. 5 (2002): 287–296.
- . *The Information Commons Handbook*. New York: Neal Schuman, 2006.
- Bennett, Scott. "Learning Behaviors and Learning Spaces." *portal: Libraries and the Academy* 11, no. 3 (2011): 765–789.
- . *Libraries Designed for Learning*. Washington, D.C.: Council on Libraries and Information Resources, 2003.
- Bennett, Scott, Sam Demas, Geoffrey T. Freeman, Bernard Frischer, Kathleen Burr Oliver, and Christina A. Peterson, *Library as Place: Rethinking Roles, Rethinking Space*. Washington, D.C.: Council on Library and Information Resources, 2005.
- Bennett, Scott. "Putting Learning into Library Planning." *portal: Libraries and the Academy* 15, no. 2 (2015): 251–231.
- Chism, Nancy Van Note, and Deborah J. Bickford. "Improving the Environment for Learning: An Expanded Agenda." *New Directions for Teaching and Learning* 92, (2002): 91–98.
- DeClercq, Caitlin P., and Galen Cranz. "Moving Beyond Seating-Centered Learning Environments: Opportunities and Challenges Identified in a POE of a Campus Library." *The Journal of Academic Librarianship* 40, no. 6 (2014): 574–584.
- "Explore Hunt Library Spaces." *NCSU Libraries*. Accessed February 6, 2017. <https://www.lib.ncsu.edu/huntlibrary/explorespaces>.
- Felix, Elliot. "Learning Space Service Design." *Journal of Learning Spaces* 1, no. 1 (2011).
- Ferer, Elise. "Working Together: Library and Writing Center Collaboration." *Reference Services Review* 40, no.4 (2010): 543–557.
- "Guelph International." *University of Guelph*. Accessed February 6, 2017. <https://www.uoguelph.ca/international/>.
- Heitsch, Elizabeth K., and Robert P. Holley. "The Information and Learning Commons: Some Reflections." *New Review of Academic Librarianship* 17, no. 1 (2011): 64–77.
- Holmgren, Richard A. "Learning Commons: A Learning-Centered Library Design." *College & Undergraduate Libraries* 17, no. 2 (2010): 177–191.
- "Knowledge Market." *Grand Valley State University*. Accessed February 6, 2017. <http://www.gvsu.edu/library/km/>.
- "Learning Commons (Hill)." *NCSU Libraries*. Accessed February 6, 2017. <https://www.lib.ncsu.edu/spaces/hill-learning-commons>.
- Lee, Young S. and Matthew A. Schottenfeld. "Collaborative Knowledge Creation in the Higher Education Academic Library." *Journal of Learning Spaces* 3, no. 1 (2014).
- Lippencott, Joan K. "Information Commons: Meeting Millennials' Needs." *Journal of Library Administration* 52, no. 6–7 (2012): 538–548.
- Little, Geoffrey. "The Space Race." *The Journal of Academic Librarianship* 39, no. 4 (2013): 351–353.
- McKay, Richard. "Building a Learning Commons: Necessary Conditions for Success." *Community & Junior College Libraries* 20, no. 3–4 (2014): 107–112.
- McMullen, Susan. "US Academic Libraries: Today's Learning Commons Model." *PEB Exchange* 4 (2008).
- Mahaffy, Mardi. "Exploring Common Ground: US Writing Center/Library Collaboration." *New Library World* 109, no. 3–4 (2008): 173–181.
- Malenfant, Chuck. "The Information Commons as a Collaborative Workspace." *Reference Services Review* 34, no. 2 (2006): 279–286.
- "Presentation Practice Rooms." *Georgia Tech Library*. Accessed February 6, 2017. <http://clough.gatech.edu/presentation.html>.
- Seeholzer, Jamie and Joseph A. Salem Jr. "The Learning Library: A Case Study of the Evolution From Information Commons to Learning Commons at Kent State University Libraries." *College & Undergraduate Libraries* 17, no. 2–3 (2010): 287–296.
- "Seven Principles." *Spaces for Knowledge Generation*. Accessed February 6, 2017. <http://www.skgproject.com/learning-spaces-toolkit/design-principles>.
- Stark, Megan and Sue Samson. "Organized Spontaneity: The Learning Commons." *College & Undergraduate Libraries* 17, no. 2–3 (2010): 260–272.
- Sullivan, Rebecca M. "Common Knowledge: Learning Spaces in Academic Libraries." *College & Undergraduate Libraries* 17, no. 2–3 (2010): 130–148.