# Commons 2.0: Library Spaces Designed for Collaborative Learning

*The information commons must adapt and evolve to become Commons 2.0, fostering student learning in new and creative ways*

By **Bryan Sinclair**

The idea of the information commons as a space for students to gather and work with technology has been with us for over a decade now. Carving out these areas has allowed many university libraries to remain relevant in the academic lives of students. Just as libraries have historically provided reading rooms for users to access and work with print collections, they now provide common spaces for them to access and work with digital collections. The information commons is a natural extension of the library's traditional mission in a wired world.

The information commons itself must adapt and evolve to meet changing expectations and technological capabilities. How well do these environments currently support social learning and promote collaborative work? To what extent do they employ flexible design and take advantage of wireless technology? Do they encourage creativity and discovery and inspire users? Do they offer services and features that students don't already have in campus residence halls and computer labs?

The "Commons 2.0" brings together a wide range of elements to foster student learning in new and creative ways. It is not a static computer lab; rather, it incorporates the freedom of wireless communication, flexible workspace clusters that promote interaction and collaboration, and comfortable furnishings, art, and design to make users feel relaxed, encourage creativity, and support peer-learning. To this add self-help graphics services, color imaging, audio and video editing, and other production and presentation software catering to student learning and needs, and the Commons 2.0 becomes a one-stop collaboratory for out-of-class assignments, writing, research, and group projects.

With the rise of Web 2.0 and social software we are witnessing a major shift in the ways students approach and use information. They no longer merely consume and download information; increasingly, they create and participate in it. They are social creatures in every way that past generations were and in some new ways, sharing information digitally and using each other as sounding boards. They value social experiences that blend communication and learning.

Social software in the form of blogs, wikis, MySpace, Flickr, and YouTube is merely an extension of this socialization in a wired culture. The software, spaces, and instruction provided to today's students should encourage them to become well-equipped participants in an online global community, skilled in written and visual communication and critical thinking. We can provide innovative spaces and facilities, but ultimately the instruction we provide is key to creating ethical and effective online citizens.

Because faculty commonly assign projects with collaboration in mind, learning spaces should align with current pedagogy. The Commons 2.0 supports new ways of learning, particularly the emphasis on team-based problem solving that more closely resembles the ways in which successful organizations and businesses operate today. Consider, for example, Googleplex, Google's headquarters in Mountain View, California, where workers are clustered in shared workspaces (sometimes with sofas, dogs, exercise balls, and mocha lattes) to promote creativity and the flow of information.[1] Or look at any of Toyota's auto plants worldwide, where problem solving is a team-based effort involving floor workers and managers in ongoing collaboration. It is no coincidence that both companies are leaders in their fields.

The Commons 2.0 supports constructivist learning, a philosophy which asserts that real understanding and knowledge are constructed through personal experience and reflection rather than conveyed passively through a classroom lecture. Nancy Van Note Chism noted the "decenteredness" of collaborative learning spaces like the Commons 2.0. This model does away with the privileged position of the lecturer (the sage on the stage) and emphasizes "co-learning and co-construction of knowledge."[2]

Beginning to think of the whole campus, not just classrooms, as a learning space also marks a shift. Shared spaces

devices can expand a single laptop display to multiple widescreen monitors so that everyone seated around a table or workspace becomes part of the project. Add a wireless keyboard and mouse, and everyone has the opportunity for hands-on input.

Access to color laser printers, poster printers, and plotters presents a challenge for many students, so the commons should provide multiple options for output. Partnering with campus departments such as printing services can enhance the features offered even further by including laminating, binding, and other document services. While some fixed workstations might be needed for specialized tasks and software such as GIS, media editing, and design applications, much of the software needed regularly can reside on campus servers and be accessed by way of a centrally managed thin client.

## Guiding Principles

The Commons 2.0 adheres to the following five guiding principles: it is open, free, comfortable, inspiring, and practical.

*Open* refers to the unconfined nature of the space. Study carrels have their place for quiet, individualized work, but not here. Glass walls may separate spaces if needed as sound buffers or to set off group study rooms along the periphery. *Open* suggests a cross-disciplinary exchange of ideas as well. The space should encourage the coming together of disciplines that are typically isolated from one another. For example, shared workspaces for students engaged in computer graphics, 3D modeling, and computer visualization can bridge the arts and sciences and encourage mutual discovery.

The untethered exchange of information made possible by wireless networks is liberating. The Commons 2.0 is *free* in that it downplays the fixed workstation and concentrates on flexibility and mobility. Wireless laptops give students the freedom to explore the commons or anywhere in the library—to group themselves as they see fit and not as decided for them. Wireless technology facilitates multitasking by allowing for

like the Commons 2.0 place the learner front and center. These informal environments are no longer "mere containers for a few, approved activities"; instead, they represent "environments designed for people" where the availability of food and drink, comfortable chairs, and furniture support a variety of active and social learning activities.[3]

### What Should the Commons 2.0 Look Like?

First and foremost, the space should employ "human-centered" design, as Malcolm Brown and Philip Long suggested, and be flexible enough to meet changing student needs.[4] This might sound obvious, but many libraries' first incarnation of the information commons resembled large, fixed computer labs that were, by and large, "hardware-centered." The Commons 2.0 arranges

workspaces in modular clusters rather than rigid rows. The tables typically have organic shapes—kidney, oval, half-circle—that encourage inclusiveness and participation. Some tables are movable, allowing different group sizes and configurations. The entire space is generally open at the center, with breakout areas along the periphery for more concentrated small-group and individualized work.

Instead of fixed workstations, the space makes use of docking stations for wireless notebook computers, which allow greater flexibility and mobility. A large majority of college students own their own notebook computers, and many libraries now check out laptops to students who do not have or choose not to carry them. The Commons 2.0 takes full advantage of notebook computers and wireless networks. Various docking

the layering of new technology with the old. For instance, students can venture out with their laptops or portable devices to peruse the book stacks or visit the library's special collections.

This space is *comfortable*. It is designed for many types of learners and learning styles, not just one. The tables and chairs facilitate collaboration, but there are different types of seating spaces as well. Sofas, large upholstered chairs, three-position chairs, task chairs, and other furnishings are found throughout the space. No one size fits all in the Commons 2.0. There is still a place for traditional library furniture—wooden tables and chairs, and table lamps—as long as the tables are retrofitted or designed with a power supply in the center. The goal is to make users comfortable. Holding focus groups or simply asking users can help determine the appropriate features.

In addition to being comfortable, the space should be *inspiring*. The furnishings, layout, and design should present a uniform and consistent vision of functionality, sophistication, and creativity.

This space should feel dynamic, with artwork that inspires users to tap into their own creative impulses. High-definition widescreen monitors throughout the space can feature rotating displays of student art and projects, for example. Paintings, kinetic sculptures, ceramics, and other art can be displayed in and around the commons to inspire users.

The Commons 2.0 is *practical*. It provides a place where real work can be done and real learning can take place. Its layout and design rely on sound pedagogical principals such as constructivist learning theory, as well as an understanding of the value systems and abilities of today's college students. It offers practical services and features such as laptop docking stations, self-help graphics, and color imaging, and it facilitates human-human interaction—student peers, student mentors, librarians, and faculty can collaborate here in real time.

Skeptics assert that this new academic interest in social software and collaborative learning is just a passing phase and that redesigning our libraries to cater to such ephemera is not the best use of scarce funding, staffing, and square footage. Technologies, media formats, and gadgets will certainly come and go, but our continued investment in computer-enhanced pedagogy is critical. We have only just begun to understand the impact that the Internet and interactive technologies will have on education and learning. In this global community, where information can be shared instantaneously and the ability to work together and understand each other is critical to our collective future, the trend toward collaboration and group learning may be one of the most important issues facing universities today. We must be willing to understand and be responsive to the needs of our community of learners. Our library spaces must continue to evolve if we want to have a place in tomorrow's university and world. *e*

## Endnotes

1. For images of Googleplex workspaces, see J. Chang, "Behind the Glass Curtain," *Metropolis*, June 19, 2006, <http://www.metropolismag.com/cda/story.php?artid=2123> (retrieved July 27, 2007).

2. N. Van Note Chism, "Challenging Traditional Assumptions and Rethinking Learning Spaces," in *Learning Spaces*, D. G. Oblinger, ed. (Boulder, Colo.: EDUCAUSE, 2006), p. 2.7, <http://www.educause.edu/ir/library/pdf/PUB7102b.pdf>.

3. M. Brown and P. Long, "Trends in Learning Space Design," in *Learning Spaces*, D. G. Oblinger, ed. (Boulder, Colo.: EDUCAUSE, 2006), p. 9.1–9.2, <http://www.educause.edu/ir/library/pdf/PUB7102i.pdf>.

4. Ibid, pp. 9.4–9.5.

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