The Computing Center at Cox Hall
Emory University

What is it?

In the winter of 2001, Emory University opened the doors to its central student computing center, revealing a state-of-the-art facility designed to foster digital literacy and collaboration among students and faculty. The 11,070-square-foot Cox Hall Computing Center reconceives the traditional student computing lab as a creative, mixed-use facility where students drive their own collaborative initiatives and faculty use incubator classrooms to test new multimedia tools and collaborative teaching approaches.

Cox Hall is designed around people, not technology. In an effort to promote sociability, the Emory design team replaced the fluorescent-lit cubicle model with a sleek, contemporary space that takes its design cues from the coffeehouse. Students have the option of using chairs or perching on large floor cushions near computer monitors set at floor-sitting level. The facility blends areas for relaxed discussion with seven distinct work areas that are distinguished by subtle environmental signals, such as shifts in wall color or lighting. Individual workstations have given way to futuristic “multimedia pods”—cocoon-like sub-spaces where groups of two or three students share computers with cinema displays, mini-DV/VHS and DVD/VHS decks, and multimedia software. Additional team stations feature computers with dual flat-panel displays and scanners, plus word-processing, desktop publishing, and statistical software. The structure of Cox Hall is purposely adaptive, to support group work and experimentation. Like rotating pieces on temporary exhibit, technological elements will be removed to make room for newer tools in this continual work in progress.

What problem does it solve?

Cox Hall filled a perceived gap in Emory’s facilities. The campus needed a center focused specifically on supporting student-driven collaborations. Cox Hall provides advanced resources students may use on an ad hoc basis or reserve in advance. Faculty can assign group work in their courses, knowing that Cox Hall will provide a plasma display station that allows student teams to share a common view, or bring classes to the facility to take advantage of the latest in collaboration tools.

For larger student study groups, Cox Hall provides three collaborative work areas. One features a 50-inch high-resolution plasma display that is often used, for example, by life science students to view three-dimensional molecular models and animations of microscopic systems and processes. In an adjacent area, students preparing for a classroom presentation can brainstorm on whiteboards and rehearse using laptops and portable projectors. A third area offers a rear-projection interactive whiteboard with a touch-sensitive surface and software that captures and saves notes.

In the evenings, Cox Hall is exclusively dedicated to student activities. For example, the Emory rugby team uses the center to review video of previous games, research upcoming opponents, and plan and capture their plays on whiteboards. Cox Hall also provides video production support for one of the most highly anticipated co-curricular student activities of freshman year: the Emory Campus Moviefest, a community-building exercise in which a thousand first-year residence-hall students work in teams of 10 to produce five-minute films in a single, frenetic week.

The numbers tell the story of Cox Hall’s success. Emory enrolls a little over 12,000 students and employers slightly more than 3,000 faculty. User visits to the old computing facility averaged 5,000 a month. By contrast, the new Computing Center at Cox Hall boasts 15,000 user visits in the average month and 17,000–18,000 visits during peak periods. On a typical day, more than 1,200 students walk through the facility’s doors. In a 2005 survey, students gave high praise to this new “learning commons,” and the Student Government Association has petitioned the university for longer hours.

How did they do it?

The initiative to renovate the central student computing lab in Cox Hall began when a core group of faculty from the language programs and others with experience in online teaching environments saw the need for an incubator space on campus, a place outfitted with the latest collaboration tools where instructors and IT staff could explore new models of teaching and learning to determine whether they were worthy of broader campus adoption. Emory’s educational technology support staff agreed there was a need for some kind of prototyping environment where they could assess the value, supportability, and sustainability of new collaboration tools before putting them in production. To this end, Emory made the decision to build a student computing center that combined open spaces for ad hoc collaboration with conference rooms and classroom spaces showcasing the latest in collaboration technologies and configurations.
When designing the Computing Center, the Emory team placed sociability and the comfort of students above all other considerations. The facility was built to telegraph “comfort and conviviality” as an ethos.

- **Emphasis on comfort:** Creative lighting, color, and flexible, ergonomic furnishings replaced florescent lights, institutional colors, and fixed seating to encourage sociability and promote group learning. Nearly all the furniture is on wheels. The décor is inviting, with hardwood floors, artsy lighting, ultramodern furnishings, and movable partitions that double as dry erase boards to fit changing needs. The most popular workstation areas have floor pillows and low tables for students working late into the night. A computer “bar” in the back of the center provides a place to quickly check e-mail.

- **Communal acoustic space:** With large numbers of students and ongoing socializing and group work, the environment is louder than many traditional academic environments. Students quickly adapted to the new environment, however, monitoring their noise levels to accommodate the needs of those around them.

- **Transparency:** As befits a space dedicated to flexibility, experimentation, and the showcasing of new models of success, Cox Hall uses transparency as a key element of space design. The open floor plan of the facility encourages impromptu collaboration by allowing students to see each other at work in the various stations and multimedia pods. The facility’s single conference room makes striking use of transparency as a design principle. An entirely glass-walled enclosure appropriately dubbed “the fishbowl” makes it possible for students in the surrounding space to watch as faculty and administrators confer. Likewise, the center’s staff invite administrators to use the fishbowl as an observation deck where they can survey the activities around them and study the ways in which students use the Computing Center’s technologies and furnishings.

Why is it noteworthy?

- **Stakeholder involvement:** It takes collaboration to design collaboration. Cox Hall is one of several educational technology centers on campus—including the Library InfoCommons, the faculty-focused Center for Interactive Teaching, and the discipline-specific Language Center. Staff from these various centers cooperated in the design of the Cox Hall renovation, based on their assessment of the gaps in the existing computing facilities on campus. They concluded that the campus did not lack for public study space where students could engage in quiet, independent study in a traditional setting. Changing student study habits, however, seemed to demand alternative spaces where study would be embedded in a highly social context. At the same, the campus needed incubator classrooms that could be used to assess the effectiveness of the latest educational technologies. As a result of their successful collaborative planning process, staff members from the library, the Center for Interactive Teaching, and the Language Center now share the incubator classrooms in Cox Hall.

- **Transformational management model:** Financial and structural mechanisms ensure that the collaborative computing environment and incubator space remain flexible and adaptable, given rapid technology changes. Emory instituted a new approach to lab management, particularly when it came to refresh cycles, to guarantee that the Cox Hall facility would serve its purpose as a test bed for effective collaboration practices.

- **Human-centered design:** To increase the digital literacy of Emory students while accommodating their collaborative study habits, designers of the Cox Hall facility reconceived the central computing lab as a sociable environment with a primary emphasis on comfort, conversation, configurable furnishings, and adaptability.

To learn more

Visit the Computing Center at Cox Hall Web site http://cet.emory.edu/cox/index.cfm.

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