By Ron Bleed

A HYBRID CAMPUS FOR THE New MILLENNIUM

We shape our buildings,
and afterwards,
our buildings shape us.
—Winston Churchill

Reform the environment;
stop trying to reform
the people. They will
reform themselves if the
environment is right.
—Buckminster Fuller

In *The Monster under the Bed,* Stan Davis and Jim Botkin introduced the idea of the need for a new kind of "schoolhouse" for our modern era. "With the move from an agrarian to an industrial economy, the small rural schoolhouse was supplanted by the big brick schoolhouse. Four decades ago we began to move to another economy but we have yet to develop a new educational paradigm, let alone create the 'schoolhouse' of the future, which may be neither school nor house."[1] I agree but would add that in the move to the new economy of the information age, higher education not

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only has neglected to create a new schoolhouse but also has retained unnecessary facets of both the agrarian and the industrial economies. For example, the agrarian school calendar is still with us. When classes finish in May, when the spring semester is over, how many of us go out into the fields to plant crops? We still have a schedule that permits us to do so, but very few of us will be doing any planting during the summer. We also continue to use the industrial-age course schedule fully intact. We build an assembly line of fifty-minute courses on rigidly scheduled days. We move the students on the hour from one room to another three times a week. We primarily base our accreditation on seat-time criteria. Thus the question is: How do we move to this new information age while still carrying these legacies of the past? What *is* the schoolhouse of the future?

I propose that the schoolhouse of the future for colleges and universities should be a "hybrid" model, one that incorporates creative uses of technology, architecture, and people. This model not only will aid us in the design of new campus structures but also will help us to improve learning and to provide the socialization that supports the making of meaning for students in our new era.

First, I would like to say that I am not proposing the distance learning model, which is conducted almost entirely with the students and the faculty physically separated. There is definitely a need for that type of learning, and many institutions, such as Rio Salado College, are already doing it well. I am also not proposing the model in which we simply "bolt" technology onto a traditional course—that is, use technology add-ons to a course to teach a difficult concept or add supplemental information.

What I *am* proposing is a drastic change in courses and facilities on campuses. The model is 50 percent virtual instruction and 50 percent redesigned physical campus spaces or, in other words, half "bricks" and half "clicks." The advantage of this model is that it gives us new designs for the new economy for new kinds of students. It is also very cost-effective. If we reduce our cost for buildings and facilities 50 percent by needing only 50 percent as much space, just think of the savings! This may also be the only way colleges and universities can keep up with the continuing population growth and the demands for lifelong learning.

More important, think of the savings to students in time and commuting costs. One of the characteristics of higher education institutions, and of community colleges in particular, is that we overlook the cost of commuting for our students. (We worry only about tuition, fees, and textbooks.) I recently read that 87 percent of all students in the United States commute to a campus—that is, 87 percent are nonresidential.[2] At Maricopa Community College District, 100 percent of the students are nonresidential or commuting. We do not factor this commuting expense into the cost of their education. If we could save them 50 percent of their commuting costs, it would mean real dollars for the students.

Yet the greatest potential of the hybrid campus is in the people dimension. Combining virtual learning with new kinds of physical spaces can restore the human moment in the educational process. Most of us recall campus life with fond memories. When we stop for a moment and think about our higher education experiences, what we generally remember most often are those moments when we connected with a faculty member or other students in an environment that sparked us. Thirty-five years ago, I started work at a small community college in Illinois. The very first week on the job, I chaperoned a dance on Friday night and played in the faculty/student softball game on Saturday afternoon; later the next week, I attended a concert starring Linda Ronstadt and the Stone Poneys. That certainly dates me, but it also shows how much has changed at our colleges and universities. When was the last time you chaperoned a dance at your institution?

Although certainly there are some exceptions, the role of socialization has declined sharply for most of our students. In 1998, in "Collegiate Life: An Obituary," Arthur Levine and Janet Cureton emphasized the declining social activity and socialization that is occurring today, even on residential campuses. I think the saddest commentary in this article was that when students were asked to name their primary recreational activity, 63 percent said "drinking." Cureton and Levine offered one suggestion: "Any event can be used for educational purposes if the food and music are good enough."[3]

To further illustrate the declining socialization, I want to describe my experience when I visited a university recently. On a Monday in April at 12:15 p.m., I went to the campus to view a wireless computer lab. After visiting the lab, I decided to walk around the campus and do some nose counting. At this university of 5,000 students, I walked into the student lounge—there were nice, big sofas in an open, airy room—and found zero students. I walked into the cafeteria and counted twenty-five students eating. Outside the cafeteria was a nice patio shaded by trees—I counted twenty students on the patio. As I walked down the hallways and sidewalks, I saw very few other students. During this "prime time," I probably saw less than 1 percent of the students outside of a classroom and in a social atmosphere. The employees may have outnumbered the students. Is this happening at all our colleges and universities?

To paraphrase John Gardner's well-known quotation: colleges have always had both their lovers and their critics, but unfortunately, the critics have seldom been loving and the lovers have seldom been critical.[4] Those of us who work in higher education tend to fall in the latter camp: we love colleges and universities. And we continue to recreate this higher education model through our own filter. Unfortunately, that filter is very personal and may not be applicable to our students. We must take an objective look, clear our filters, and be more critical about what we are doing on our campuses. I believe that technology, architecture, and people have important new roles to play in this process. They are not antiforces that threaten to destroy human contact but are powerful influences that could introduce new ways to restore socialization to the campus experience for our students.

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First is technology. I find it interesting to walk around the Maricopa Community College District campuses to see the impact of technology on the students. I recently visited Phoenix College at 7:30 a.m. I went into the new Library Computer Commons area, and it was nearly full! There were not many students at other places on campus. A day later I went over to Mesa Community College at four o'clock in the afternoon, and the new Computer Commons Library was bursting with students and activity. If you visited any of the computer labs at our colleges and had some kind of Geiger counter to measure student energy, you would discover that the greatest student activity and energy is now occurring in computer labs.

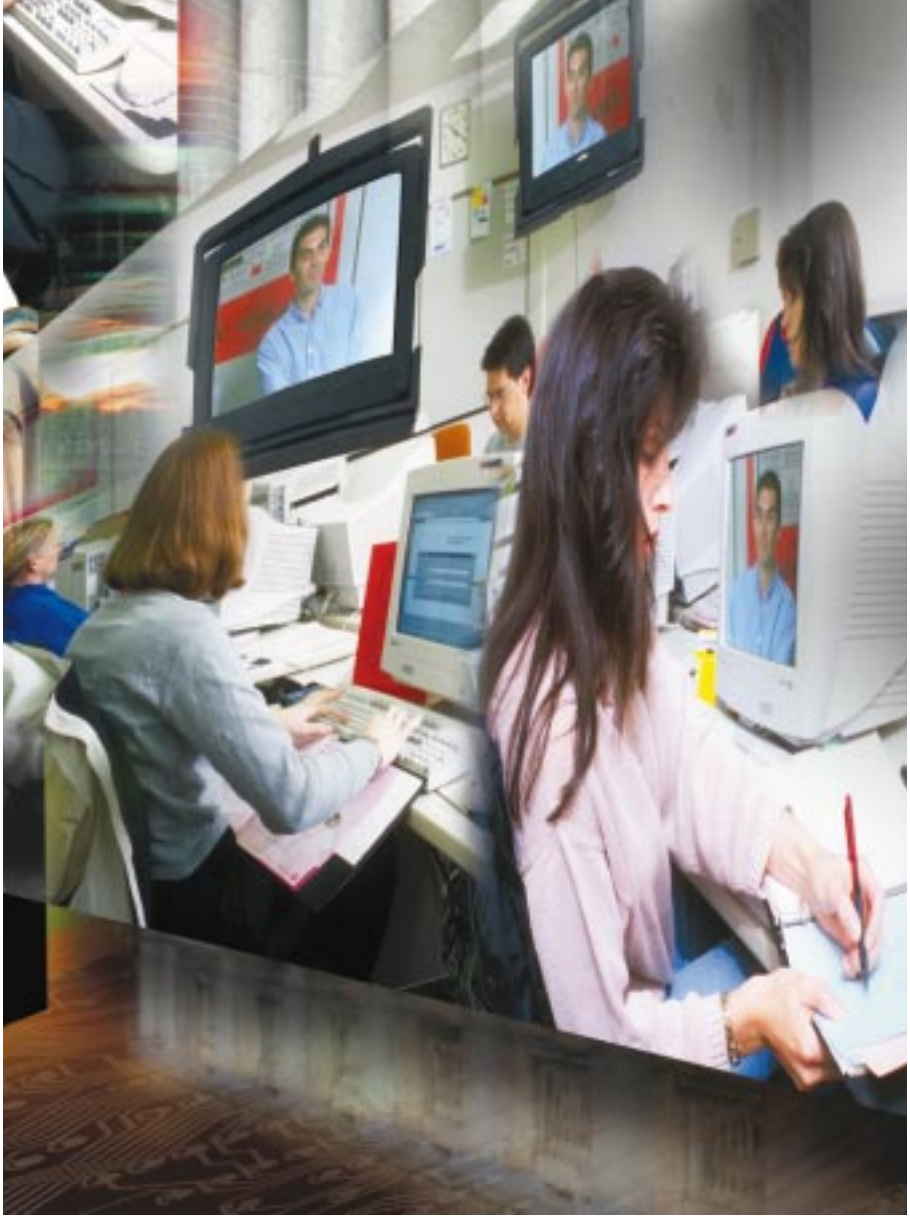
Technology is a direct influence on socialization. John Nasbitt popularized the idea of "high tech, high touch." He said that in a counterreaction to increasing technology, we seek out greater high-touch situations.[5] In addition, new kinds of solutions to improve socialization exist within the functions of technology. For example, a recent article in *USA Today* reported on a study about the increasing number of women on the Web and how the Internet is strengthening ties with families and friends. Seventy-three percent of the women in the study said they were "contacting family and friends more often and sooner through the Web and in person."[6] Technology does not destroy high-touch. The e-mail age is a wonderful vehicle for it.

Second is the influence of architecture on socialization. The cornerstone ideas regarding this role of architecture come from Bill Mitchell, dean of the School of Architecture and Planning at MIT. In his book *City of Bits*, he notes that the idea of a campus was historically created to give students proximity to scarce resources. He adds that today's "digital networks eliminate some of the proximity requirements" but that others remain for face-to-face communication.[7] Our job as college and university planners is to analyze the changing requirements for proximity to scarce resources.

A good example of this concept is my experience last year when I had the great privilege of visiting a state university in Karelia, Russia. This university illustrates how scarce resources can dictate the instructional mode. Students at Petrosvodosk State University can't afford textbooks or even paper notebooks to write in, and thus lectures are the primary method of delivery. Students are in class for forty hours a week because of this scarcity of books and paper. The students need large amounts of proximity because of the scarce resources.

Don Norris, a futurist and consultant, has noted a current-day contradiction: "Despite people retreating, in some ways, to their homes and their computers, at the same time they are being drawn to great and good public places that satisfy and nurture their need for community and human interaction and the excitement of city spaces." He suggests that some of these buildings are the new science centers and museums and the exciting new libraries we see in urban settings.[8] These "great and good" public places can also be new kinds of campus buildings. If we *don't* create these campus structures to bring people together, Peter Drucker, the management futurist, predicts that "thirty years from now, big university campuses will be relics."[9] How do we counteract that dim future?

The American Institute of Architects (AIA) has developed a model for the campus of the future.[10] The AIA argues that architecture should give the learner a strong identification with the college or university by creating informal settings that encourage the integration of student services and academics. The association also suggests incorporating community-based learning resources and describes flexibility and adaptability as important characteristics in which to accommodate a variety of different learning needs. A room should be flexible enough that it could be easily rearranged during a day to host different teaching and learning formats. Also, to support interaction, the AIA advocates a sense of smallness to foster



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working together. An interesting rule of thumb for small working spaces like conference rooms is that 70 percent of these rooms should be designed for less than twelve people. Another requirement is access to technology, needed to navigate the vast, expanding worldwide networks. Finally, the AIA model includes support for research that will lead to continuous learning for faculty, students, and staff.

Mitchell has suggested some of the characteristics of the right formula for the mix of bricks and clicks in the hybrid campus. First of all, more physical spaces should be devoted to dining and social activities—not necessarily to classrooms. There should be some highly serviced teaching and research spaces such as laboratories; it is the very general teaching spaces that should be remodeled. The hybrid model should have ubiquitous on-campus network connections so that students can access the virtual components of their learning within the local urban context and also, of course, with global connections. Mitchell explained: "You get to these kinds of understandings by first fragmentation then recombining in new patterns. You have new freedom to assemble the participants in new ways." He starts with the example of Amazon.com, where the buying of books was first fragmented and then recombined in new patterns. Buying and browsing for books now occurs increasingly at home rather than in multiple bookstores and retail locations with inventory inside the store. And facilities for large warehouses have been recombined to ship those books to the buyers.[11]

Three notable examples of recombining can be found within the urban area of the Maricopa Community College District. The first is Union Hall, a Web theater. Two entrepreneurs are remodeling the old Phoenix Union High School to create a new kind of theater for video-on-demand for concerts, sports performances, and similar events. People will be able to go to Union Hall and make recordings, which will then be shown on the Internet for pay or for free at some future date. The buildings will have virtual stages to provide backdrops from anywhere in the world. As those of us in higher education design our new performing arts centers, this should be one of the first places we visit. As a result of this new kind of theater and the media format of the new era, many more people throughout the world will be able to witness recorded performances.

At Scottsdale Community College is the Maricopa Institute for Arts Entertainment Technology. Twelve programs, some of which had minimal enrollments, were fragmented and then recombined into a new institute that includes the disciplines of acting, broadcasting, computer graphics, music, writing, theater, Web design, and technology. Thus a fine arts program was turned into an occupational program in which students are learning skills that will lead to good jobs in the very near future.

A third example, Corpedia, was recently featured in articles on Web education in the *Arizona Republic* newspaper and in *Forbes* magazine.[12] A thirty-one-year-old Phoenix resident, Alexander Brigham, has created a new company in

which he fragmented the educational market beyond colleges, universities, and companies down to individual scholars. He has contracted with Peter Drucker to deliver thirty-one lessons on management to whoever chooses to buy the lessons. He is also seeking accreditation for this program. Brigham claims: "Education is the biggest industry that is still fragmented. The growth opportunities are incredible."[13] We need to pay attention to Brigham's concepts of fragmentations and recombinations.

Examples of ways to recombine facilities and technology and still increase socialization can be found everywhere. Recently I was changing planes at Denver International Airport and came across a very interesting sight. There was this cowboy-looking bar with a big sign that read "31 beers." I thought, "Hey, I'll go in and get a cold beer and listen to some country music." When I walked through the swinging doors of this place, I saw mounted deer heads on the walls and sawdust on the floor. Then I noticed that every slate table and the bar were wired with Internet connections and built-in computers. There was more technology in the Cowboy Internet Bar than in any other social setting I had ever seen.

This experience is similar to a story I heard recently. When the University of Chicago was designing its new USITE/CRERAR computer lab, it did not do the usual thing and visit other institutions to see how they were building their computer labs. Instead, representatives from the university went out and visited several cyber-cafes in the Chicago area. And there is a wonderful example from Florida. St. Petersburg Junior College has created the Hard Drive Café, a multifunction, specialized facility centered within an academic office and classroom building. Included in this facility is a one-hundred-station open-computer lab, deli lounges both inside and outside, a tutoring center, a career counseling center, and a testing center—all in one facility. Food, counseling, testing, and computers are all intermixed. The other interesting part of this story is that when the college hired an architect to design the building, the primary criterion for selection was experience in designing restaurants—not schools.

Not too long ago I visited King William I College in the Netherlands, which has a beautiful high-tech building called School for the Future. This was as impressive an advanced technology building as any we have in the United States. However, the first thing our Dutch hosts did was take us immediately to the center of the building, where there was an attractive dining area. They served us apple pie and coffee in a first-class social atmosphere.

Another example of this new recombined architecture is in Virginia at the University Center of George Mason University. This is a state-of-the-art, open-space facility with the meeting, activity, and food service typically associated with a student union. This center enables commuting students to fuse classroom and independent learning, work, banking, commerce, recreation, dining, and even the expression of

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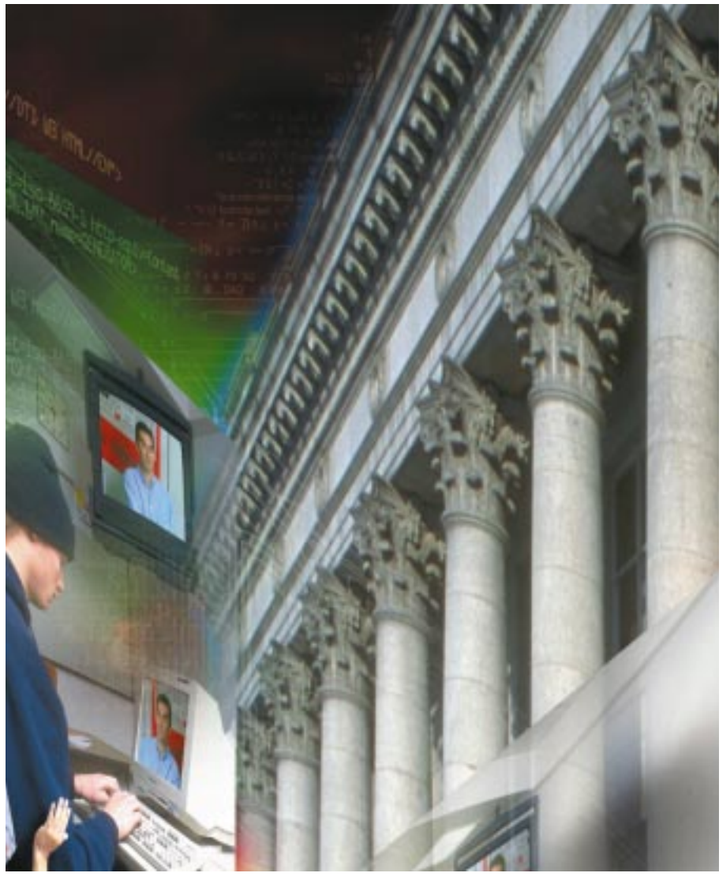

spirituality together at one location. The center is designed much in the mode of a large shopping mall, with color and music used to attract today's generation of students.

To summarize my thoughts on architecture, I return to the ideas of Mitchell: "[The] crucial task is not digital plumbing of broadband communication links and associated electronic appliances." He adds, "Nor is it producing electronically deliverable content." Mitchell says that our real task is "imagining and creating digitally mediated environments for the kinds of lives that we want to lead and the sorts of communities that we will want to have."[14] What a great vision on which to build a strategic plan!

I've commented on technology and architecture, but the most important factor in restoring socialization to the campus experience for college and university students today is still people—you and me. It is easy for those of us in higher education to be captivated by the allure of the brilliant advances and the frenetic pace of technology and by the innovations in architecture. But the fun and excitement of our business can easily cloud the core essence of who we should be. We need to sustain both values and moral courage. We must remember that a major purpose of higher education is for students to compose a sense of meaning for their lives. Let's challenge ourselves to build into our systems and our personal and professional behavior the mentoring capability that supports the making of meaning by the students of the new era.

What is the right mix of bricks and clicks for higher education? How can we build the hybrid campus? What are some new ways to fragment and recombine learning and social experiences? And finally, what are you, as an individual, doing to connect with and to mentor students?

Notes

1. Stan Davis and Jim Botkin, *The Monster under the Bed: How Business Is Mastering the Opportunity of Knowledge for Profit* (New York: Simon & Schuster, 1994), 23.
2. "The Role of Commuter Programs and Services," National Clearinghouse for Commuter Programs, <http://www.inform.umd.edu/nccp/cas.html#contextual.statement> (accessed October 24, 2000).
3. Arthur Levine and Janet Cureton, "Collegiate Life: An Obituary," *Change* (May–June 1998), 14–17.
4. John W. Gardner, *The Recovery of Confidence* (New York: Norton, 1970).
5. John Naisbitt, with Nana Naisbitt and Douglas Philips, *High Tech, High Touch: Technology and Our Search for Meaning* (New York: Broadway Books, 1999), 23.
6. "Women No Longer a Blip on Computer Screen," *USA Today*, May 11, 2000, 11D.
7. William J. Mitchell, *City of Bits: Space, Place, and the Infobahn* (Cambridge: MIT Press, 1995), 47–57.
8. Donald Norris, <http://www.pbs.org/adultlearning/ als/scup/.exemplars/fusion.html> (accessed March 17, 1999).
9. Peter Drucker, "Seeing Things As They Really Are," *Forbes*, March 10, 1997, 127.
10. The AIA model is presented in Bruce A. Jilk, "Designing a Model for the College Campus of the Future," *AIArchitect* (April 1998) <http://www.e-architect.com/pia/cae/col_futr.asp> (accessed October 24, 2000).
11. William J. Mitchell, presentation at Sun Computer Education Research Conference, San Francisco, California, February 24, 1999.
12. "Corpedia Lands Deal with Business Guru," *Arizona Republic*, May 3, 2000, D1.
13. "Drucker's Disciple," *Forbes*, May 15, 2000, 86.
14. Mitchell, *City of Bits*, 9.