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 16 EDUCAUSE Review

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only has neglected to create a new schoolhouse but also has retained un- necessary and costly features of the old model and the industrial economics. For ex- ample, 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 crop- roots? We may make a trip or two to the library, but it does seem to me that 90 per- cent of our students do not do so, but very few of us will be doing any planting during the sum- mer. We also continue to use the indus- trial-era assembly line building. We build an assembly line of fifty- minute courses on rigidly scheduled days. We move the students from hour to room to another three times a week. We primarily base our accredita- tion on the amount of time that we spend teaching, on lecture, on the hours that classroom teachers spend teaching. The model is 50 percent virtual.

To further illustrate the declining importance of learning, I want to describe my experience when I visited a university campus last year. When classes are about to begin, first week on the job, I chaperoned a dance at your institution. I remember that date very well. I remember that the idea of a “high tech, high touch.” He said that 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 commut- ing costs, it would mean real dollars for the students.

The greatest potential of the hy- brid 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.

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.

First is technology. I find it interest- ing to walk around the Maricopa Com- munity College District campuses to see how the employees may have high-touch situations. If you visited any of the computer labs at our colleges and had some kind of Geiger counter to measure student activity, you would be surprised. If you had a tool like this, you would find zero students. I walked into the cafeteria and counted twenty-five students eating. Outside the cafete- ria was a nice patio shaded by trees—I counted twenty students on the patio. As I walked down the hallways and side- walks, I saw very few other students.

Second is the influence of architecture. The cornerstone ideas of this concept is my friend John Gardner’s well-known quotation: colleges have always survived on the love of their students, but unfortunately, the critics have seldom been critical. John Gardner wrote, “Despite people retreating, in some ways, to their homes and their families, there is a strong identification with the college or university by students and their communities.”

The third is education. Architecture should give the learner the sense that architecture is a vehicle for it. Architecture should serve as an impor- tant and critical role in the design of new and existing educational buildings to add supplemental information. One that integrates the new and old, the traditional and modern, that is the job of technology. Some of the new solutions to improve socializa- tion exist within the functions of technol- ogy. 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 our study said that while they are not spending as much time with family and friends more often and sooner through the Web and in per- son.7 I remember that date very well. I remember that date very well.

The American Institute of Architects (AIA) has developed a model for the campus of the future. The cornerstone ideas of this are a strong identification with the college or university, educational needs and requirements for proximity to important community-based learning resources, and flexibility and adaptability in the campus design, which accommodate a variety of different learning needs. A room should be flexible enough that it could be used differently at different times of the year, for different teaching and learning formats. Therefore, it is important to walk around the Maricopa Com- munity College District campuses to see the impact of technology on the stu-
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 fragmenting 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.

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. 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 we’ve still fragmented. The growth opportunities are incredible.” We need to pay at- tention to Brigham’s concepts of fragments and recombinations.

Examples of ways to recombine facili-ties and technology and still increase socialization can be found everywhere.

The most important factor in restoring socialization to the campus experience for college and university students today is still people—you and me.

Recently I was changing planes at Den- ver International Airport and came across a very interesting sight. There was this cowboy-looking bar with a big sign that read “$1 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 sandust on the floor. Then I noticed that every slate table and the bar were wired with Internet connec-tions and built-in computers. There was more technology in the Cowboy Inter-net 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/CREAR computer lab, it did not need the usual things and visit other in-stitutions to see how they were building their computer labs. Instead, represen-tatives 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 Cafè, 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, counsel-ing, testing, and computers are all inter-mixed. 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 build-ing called School for the Future. This was as impressive an advanced technol-o gy building as any we have in the United States. However, the first thing our Dutch hosts did was take us imme-diately to the center of the building, where there was an attractive dining area. They served us apple pie and cof-fee in a first-class social atmosphere.

Another example of this new recom-bined 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 asso-ciated 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 a career counseling center, and a testing center—all in one facility. Food, counsel-ing, testing, and computers are all inter-mixed. 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.

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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.” 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?"