Since the Internet became widely used in the early and mid-1990s, much has been prophesied about its impact on higher education. Yet the public debate has often been shrill and polarized, obscuring the true potential of the new technologies. Typically, what we hear are arguments between those rushing to embrace the Internet as an alternative to, and even a substitute for, traditional means of education and those fearing that technology threatens the face-to-face interaction that makes college and university campuses vital, transforming places.

On the one side are Internet entrepreneurs, venture capitalists, and some academicians who argue that “distributed learning” will permanently and beneficially alter the landscape of higher education, potentially rendering the campus-based university obsolete. As one member of this camp, Columbia University Teachers College President Arthur Levine, warned in a much discussed and much critiqued essay in the New York Times, “Colleges and universities are not in the campus business, but the education business.” On the other side are faculty, administrators, and interest groups who argue that distributed learning has the potential to undermine the learning process—a process they believe must be entirely face-to-face and campus-based. Some of these critics see no educational value whatsoever in new technologies and resist any move away from age-old, low-tech pedagogical approaches.

Even those in higher education who do embrace technology seem frequently to be motivated by a desire for quick cash (in the form of investor capital and imagined future profits) or by fear rather than by educational vision. These motivations have sometimes been evident in the rush by colleges and universities to spin off for-profit companies either to protect their programs in the fast-growing adult-education market against new for-profit entrants or to expand into new markets such as corporate training, or both.

What is less common, or perhaps simply receives less attention, is an institution that makes a careful, reasoned decision to embrace distributed learning technologies not just as an addition to its campus offerings but as a way to strengthen the campus experience and better serve existing student populations. This linkage of Internet-based education with campus-based learning is where the great untapped educational potential of the Internet lies for colleges and universities. At an overwhelming number of these institutions that do link distributed and campus learning, the most profound educational moments will continue to occur in the classroom, in face-to-face interactions between students and faculty, and in what happens on residential campuses in the evening and on weekends. Yet the Internet can be a powerful force in strengthening these educational and social experiences.

Students who have increasingly grown up buying clothes, reading the news, chatting with friends, doing research, and applying to colleges and universities online have come to expect to use the Internet in all facets of their lives. Yet just as they maintain their relationships both face-to-face and online, and just as they shop at both bricks-and-mortar stores and online commerce sites, college and university students will expect to experience their education both in person and online. And just as there is a time when e-mailing a friend makes sense and a time when seeing the friend in person makes sense, so too are there times when online education works and times when face-to-face interaction is superior. The competitive advantage of traditional campuses, the “old-school” schools, is that they can offer both.

Many faculty, given support and resources, come up with ingenious ways to use the Web to complement the classroom experience. At Mount Holyoke, a biology professor and her students are using video microscopy (making time-lapse movies with a video camera attached to a microscope) and posting their “movies” on the campus network.
In addition to helping students gain an understanding of such cellular processes as division and locomotion, the videos have encouraged them to share their findings. Says one student: “When we work in the lab, we typically only get the chance to see our own work. Now I can hop on the Internet and take a look at my classmates’ videos.” And, she adds, she can “chat” online about lab experiences.

There are many possibilities for exploiting the power of technology and the Internet in combination with classroom-based education. Necessary lectures on basic, foundational concepts may be conveyed through streaming video over an intranet system so that students can easily repeat difficult or complex portions of the lecture (and go back to the lecture at their convenience) and thus come to class prepared with questions and observations. The result? In-class time is more effectively utilized because of increased time spent in meaningful discussion. Similarly, guest lectures can be videotaped and simulcast on the Internet, drawing alumni, prospective students, and students studying abroad into campus life. Even years after the lecture, faculty may put the downloadable lecture on the campus intranet, along with the reading assignment for that day, for students to click on and watch.

In these ways, the campus-based classroom experience is strengthened, not threatened, by the integration of distributed learning technologies. The challenge for those in leadership positions in academia is to go beyond the “Let a Thousand Flowers Bloom” model characterized by individual faculty initiative and to create a sustained, strategic push toward an “e-campus”—a campus that harnesses the best attributes of a physical campus and the greatest strengths of technology. But creating an e-campus is more than just wiring dormitories for high-speed Internet access, equipping classrooms with the latest technology, or designing pretty Web pages aimed at external audiences. An e-campus uses technology to strengthen the residential, interactive nature of the entire campus experience.

Every activity—from conducting course registration to processing financial aid to administering final exams—is critically evaluated and the question asked: Do technologies allow us to enhance the way we deliver this service or provide this academic experience for students? Answering this question will force higher education institutions to advance to new levels of creativity and entrepreneurship. Many colleges and universities do not currently have the expertise or resources to create an e-campus. Institutions will have to push against existing boundaries and look outside their walls for ideas and inspiration. Consortial relationships, outsourcing, partnerships with for-profit providers, and well-conceived spin-offs of particular activities will all be increasingly common as institutions seek to utilize their resources to maximum effect. There are many lessons to be learned from the business world, where companies are finally beginning to recognize the competitive advantage of leveraging their physical locations through their online initiatives (resulting in “clicks and mortar” or “clicks and bricks”).

The self-examination that colleges and universities must undertake will not be easy, but the payoff will be well worth the work. The marriage of technology with traditional modes of learning will leave us with institutions that are more intimate, more residential, and more personal. Rather than making residential campuses obsolete, technology and all that it enables can help to further distinguish these institutions and make the American system of higher education, already the envy of the world, stronger than ever before.

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