Recently I enjoyed reading a book written by a U.S. Army officer who had spent much of World War II flying the military version of the venerable Piper Cub (65 horsepower L-4) a few hundred feet above battles in Africa, Italy, France, and Germany. He commented that although his responsibilities were usually not as exciting as they may have been if he’d been close to the action on the ground, the perspective and views were significantly better above the trenches. As I read this, it occurred to me that emeritus status is a little like flying above the “real action” on the ground: though perhaps not as exciting, it does offer the opportunity for a broader perspective. So I accepted when Mely Tynan, the EDUCAUSE Review Viewpoints Department Editor, invited me to share a few observations about the world of a retired CIO and the new views that might emerge from being a “geezeru” (Ken Klingenstein derived this title, describing one who is no longer a guru but yet not quite feeble enough to be a geezer). These general observations serve as a bookend to the EDUCAUSE article that Dan Updegrove and I coauthored, almost nine years ago, when we were deep within the IT trenches.

My emeritus status simply means that I’m retired but am allowed to continue using my former title to impress relatives and neighbors who wonder why I am walking the dog or answering the home phone while everyone else is at work. Before petitioning the UC Berkeley chancellor to grant me this privilege, I searched the human resources website of the University of California to confirm that staff emeriti do in fact exist. I learned that this official status may be granted by a campus chancellor, but I was unable to discover even one privilege appertaining thereto. The chancellor and I settled on the privilege of allowing me to keep my long-standing e-mail account. But my “emeritus” title does carry another, unstated privilege: it signifies to me, and I hope to others, that I want to remain involved in the ongoing process of demonstrating why IT really does matter to higher education.

Even though I have been working in this field for more than forty years, I continue to be surprised by the unending stream of new developments, both technical and organizational. Consider, for example, the rise and fall of many IT corporations during the past several years. I did not predict that Cray Computer Corporation would go bankrupt in 1995, or that Control Data Systems would be purchased by Syntegra in 1999, or that Digital Equipment Corporation (DEC) would be acquired by Compaq in 1998, or that Compaq would subsequently merge with Hewlett-Packard in 2002, or that PeopleSoft would be acquired by Oracle in 2005. How many of us foresaw that the tiny company founded in 1998 in Menlo Park, California, would become the Google of today? What about Yahoo!, Facebook, MySpace.com, YouTube, Second Life, and the blogosphere? This rapidly changing landscape shows why colleges and universities need to be very careful about forming strategic alliances—with whom, for how long, which services, what price, what contract terms and service level agreements, what privacy and security safeguards, what intellectual property rights, and what backup policies.

In many presentations through the years, I have used Moore’s Law to explain the exponential increase in the capabilities of IT hardware and the corresponding decrease in its size. Nevertheless, I marvel today at the thousands of high-quality photographs and recordings that can be stored on inexpensive SD cards and ever-shrinking MP3 players. For several years, high-performance computer networking capacity has doubled approximately every nine months, and advances in fiber optics promise to maintain this well-established pattern.

These technological realities and the resulting economic consequences have created opportunities and pressures for information technology to spread from centralized centers to departmental facilities and then to every desktop. IT organizations at colleges and universities are still struggling with how to manage and govern such highly decentralized environments because they tend to create gaps and overlaps in IT services, to hinder campus-wide security and privacy practices, and to waste limited resources. Many colleges and universities are developing new governance structures and processes with the intent of rationalizing an all-too-often chaotic IT environment. They need more responsive and transparent governance to anticipate, react to, and navigate through this highly connected world that enables new relationships with departments on campus, with remote campuses, with research organizations, and with corporations located throughout the world.

Higher education is clearly investing a great deal in information technology, but have we transformed the basic processes at the core of our institutions?
The answer to this question is most certainly “yes” when we consider the research enterprise. To encourage the continuation of this transformation and to support the leadership role of the United States in science and engineering, the National Science Foundation (NSF) formed the Office of Cyberinfrastructure in 2005 with the following overall vision: “NSF will play a leadership role in the development and support of a comprehensive cyberinfrastructure essential to 21st century advances in science and engineering research and education.” It is now common for researchers to belong to large international groups of researchers who are studying similar problems and sharing resources. The NSF describes these evolving structures as virtual organizations, and it confirms that they are revolutionizing science and engineering research.

The answer is probably also “yes” when we review most bread-and-butter administrative processes such as registering for courses, applying for and receiving financial aid, processing grades, paying bills, collecting revenues, and posting online, often significantly before they are formally published in journals.

But what about the core teaching and learning missions: have they been transformed as well? I believe that in this case, the answer is much less positive. Several people have observed that if Socrates were to reappear in a modern university research laboratory, he would be completely dumbfounded by what was going on. But if he were to go down the hall to a typical classroom, he would certainly understand what was happening, although he would likely be disappointed by the size of the class and the quality of the teaching. Of course there are exceptions, and EDUCAUSE Review does an excellent job of highlighting many exciting innovations in teaching and learning.

For the public-service mission of our institutions, the answer again is “yes.” The Internet enhances this mission by making treasured library and museum collections widely available. Many lectures, special events, calendars, and sometimes entire courses are freely available through the web. Research results are routinely available online, often significantly before they are formally published in journals.

A colleague recently asked if I enjoyed my new job as my wife's OS X system administrator. It's true that evaluating the pros and cons of moving her operating system to Leopard is significantly less stressful than deciding when, or whether, to upgrade a campus-wide ERP system, but the consequences of a mistake are similar—and a lot more immediate and personal. Regardless of our current responsibilities, we all need to get away from the pressures of today's operational issues so that we may frame the important questions that will lead to significant advances tomorrow. My hope is that those of us with emeritus titles, those of us flying above the trenches, can use our new perspectives to find ways to participate and help in this process. I believe that the greatest IT challenge today is to discover how to take the almost magical advances in information technology and use them to integrate teaching, research, and outreach into unified and exciting learning environments that will engage students of all ages. When we succeed in this challenge, we will truly understand why IT matters to higher education.

Notes

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