n 2005, Diana G. Oblinger, an EDUCAUSE vice president, addressed plenary sessions at the annual conferences of APPA, the National Association of College and University Business Officers (NACUBO), and the Society for College and University Planning (SCUP).



**Diana Oblinger** 



**Richard Katz** 

Both she and Richard N. Katz, also an EDUCAUSE vice president, will be at the July 2006 joint APPA/NACUBO/ SCUP conference, The Campus of the Future: A Meeting of the Minds, where Katz will be a member of the Futures Panel that will kick off the program and Oblinger will present a session on Education for Our Times: Expertise and Engagement.

Terry Calhoun: Diana, you presented an excellent keynote address at the APPA, NACUBO, and SCUP conferences in 2005, bringing us all up-to-date on the new generation of college students. There was a lot of interest in what you had to say among the attendees, who will mix for the first time as a single group at The Campus of the Future conference this July. Have you any new ideas or thoughts that came about from observing the reactions and questions from the varied groups in attendance? Diana Oblinger: One of the things I've learned is that the issues raised have broader applicability than I had guessed. For example, the discussion of the Net Generation and the move to more media-rich forms of communication catalyzed a cashier's office to rethink its website when it immediately realized that text-heavy pages might not be meeting students' needs. Another individual volunteered that a library redesign has changed based on the notion of informal spaces and peerto-peer collaboration.

Also, I think all groups have found it valuable to think about the Net Generation in their workforce, whether that is the business office, facilities, or human resources. Will these Net Gen employees be able to work through text-heavy instructions? Will they have patience for the detail or time lag involved in many college and university processes? Will they respond to authority or are they more likely to want to decide things on their own? What kind of professional development will be most effective for new employees?

Of course there is another kind of response that I hear fairly often, and that is that "our students aren't like that." In fact, one institution was so certain that its students were different that it undertook a study to find out. That institution was good enough to come back and tell us that they were, in fact, very much like what we'd described.

That has happened more than once. But it is important to not just take someone else's word for things. That is why we've been beta testing a survey that EDUCAUSE members

AN INTERVIEW WITH RICHARD KATZ AND DIANA OBLINGER

THE

By Terry Calhoun

Terry Calhoun is director of media relations and publications for the Society for College and University Planning, Ann Arbor, Michigan. He can be reached at terry.calhoun@scup.org.

can use to find out more about what their students—and faculty—think about information technology (IT). We think this will help people not just understand more about their students, but have a dialogue about what IT means to their institution.

**Calhoun:** Richard, ten years ago SCUP published the book Transforming Higher Education by Michael G. Dolence and Donald M. Norris—it was a best seller, we've not had success like that with a publication since then. Was the timing just right? What was your reaction to the book in 1996? **Richard Katz:** I was very enthusiastic. The book closely paralleled in perspective and impact the piece Sustaining Excellence in the 21st Century, which I authored in 1992 with California State University's Richard West and which was published by the National Center for Higher Education Management Systems (NCHEMS), and the report Transforming Part of that cultural change is a move from a hierarchical structure to one that is more lateral and distributed. Another part is the demand for more immediacy. I guess the bottom line is that I think it isn't technology that changes things, but our culture. And culture has certainly been changed by technology.

**Katz:** I am struck by these same two feelings. First, we were all spot on about the course that IT would take. Second, we underestimated both the rapidity with which changes would occur in domains like research and the slowness of change in a host of higher education institutional processes, both instructional and administrative.

What I know that I failed to really understand was the inherently empowering nature of the technologies we were unleashing. I naively, to use Diana's term, believed that we could control how innovation could be assimilated in the academy. I understood that IT would facilitate a shift in

As I continue to watch students and how they use technology, I am struck that our entire culture is changing. Students are often harbingers of cultural change and I think that is as true today as it was in the '60s or '70s. Culture has an impact on what we think, how we behave, and how our organizations operate.

Administration at UCLA—A Vision and Strategies for the 21st Century (an internal University of California, Los Angeles document). In the early 1990s the authors of these works all collaborated and shared a vision of how IT in general and networks in particular could transform higher education in all aspects.

# **Calhoun:** If that book were rewritten now, with the experience of the past ten years, what perspective on the next ten years would you advise the authors to have?

**Oblinger:** When I look back at material that is ten years old, much of it tells people they have to change because technology has opened new opportunities. We also heard a lot about e-learning and how you've got to get on board now because the train is leaving the station. Those who were skeptical of the dot-com movement are pleased to tell us all how that ended. I don't know that many of the visions were so terribly wrong, but how we thought we would get there was perhaps naive. Technology was in the lead, not people.

As I continue to watch students and how they use technology, I am struck that our entire culture is changing. Students are often harbingers of cultural change and I think that is as true today as it was in the '60s or '70s. Culture has an impact on what we think, how we behave, and how our organizations operate. "power" from the central campus units to the academic departments. What I didn't realize was that this shift was overwhelmed by a much bigger devolution of power from the institution's center to key campus stakeholders like faculty and students. We're only at the beginning of understanding how research and instruction will be carried out in the context of this massive (and in many ways unplanned) devolution of power.

This devolution of power makes rewriting the book a monumentally difficult task. In retrospect, the vectors of change seemed easy and manageable. Today, real learning and real research take place in many contexts and only some of these contexts are formal ones. The boundaries between facilitated learning and self-study are blurring as are the boundaries separating amateur research, such as in astronomy, from professional research. My guess is that this process of blurring boundaries will only gather steam in the time ahead, making forecasting the future a very dicey enterprise.

**Calhoun:** Richard, you've been an avid proponent of getting the campus CIO right up there in the midst of strategic planning initiatives, and rightfully so. Do you think this is happening more? Do you see the CIO in the campus of the future as even more deeply involved in strategic planning and decision making? **Katz:** My sense is that the data are equivocal. On the positive side, it is absolutely clear that more and more CIOs are sit-

ting on the president's leadership team or cabinet. It is also clear that a seat on the cabinet has a really positive impact on one's influence and ultimate success in the job. On a less positive note, it is equally clear that CIOs have been only partially successful in causing their executive colleagues to assume responsibility for the process changes that IT can enable. As a result, IT investments often deliver tactical results rather than strategic results, because strategic change demands culture change, leadership engagement, aligned rewards, and other things that are outside the scope of a CIO's responsibility.

**Calhoun:** Diana, EDUCAUSE, especially the EDUCAUSE Learning Initiative (formerly NLII), has recently done some excellent work on the design of learning space, including a great issue of EDUCAUSE Review in 2005. As a result of that and other trends, no one talks much about just "classroom design" anymore.

How do you see learning space design working in the campus of the future? Will it get not only outside classroom design and into virtual space, but include—as many who think about the "intentional campus" believe—all campus space? What do you foresee as the makeup of the teams of people who plan for learning space?

**Oblinger:** The notion is becoming that the entire campus is a learning space—and that doesn't even begin to include all the virtual spaces associated with it!

Learning space design is a big issue for colleges and universities, and it is much more than whether you use tablet chairs or tables in a classroom. There is a concept called "built pedagogy." Basically the design of a space will lead you to a certain type of pedagogy. If all the chairs are facing forward and there is only a single focal point to the room, you're probably going to lecture in that space. The way it is built pretty much dictates the pedagogy. This kind of thing can happen in informal spaces as well. You can walk through lounges or courtyards and see benches bolted to the floor, making it impossible to pull chairs together for informal chats.

# **Calhoun:** I've heard that called maintenance-driven classroom design. Do you think that is going to change on the campus of the future?

**Oblinger:** What I believe will happen is that we'll start paying more attention to the flexibility of our spaces—and to how welcoming they are to different types of activities. This doesn't mean that you have to wait until you get to construct a new building. Interesting things have been accomplished by changing lighting schemes, adding movable furniture, or even putting up artwork. Learning happens all the time—and it happens through people. Our spaces should encourage that.

Interesting things have been accomplished by changing lighting schemes, adding movable furniture, or even putting up artwork. Learning happens all the time—and it happens through people. Our spaces should encourage that.

You mentioned teams; that is a very important concept in learning space design. Some of the best spaces are designed by teams with different perspectives, such as a faculty perspective, a student perspective, a maintenance perspective, and so on. And, if what we're trying to do is to design spaces to make people comfortable and engage them, perhaps we need to involve people who design restaurants or other types of facilities. The Computing Center at Cox Hall at Emory University is a great model of innovative space. I understand they involved someone who had experience designing restaurants and bars, not just classrooms. The student traffic in the Cox Center certainly attests to its success.

Another important point, though, is where the discussion begins. We need to be thinking about the activities we want to enable, not jump directly to considerations of HVAC (heating, ventilation, and air conditioning) systems or audiovisual equipment. And, it is important to have a set of guiding principles. That way when trade-offs or decisions have to be made, you can use the principles as a guideline.

**Calhoun:** Get crazy for a moment, you two. Speculate a bit about what you see a student's daily life looking like in 2015. It doesn't have to be the "traditional" student in a four-year on-campus program.

**Katz:** The metaphor that has captured my interest is that of ecosystems. In the 1970s and 1980s, we thought of pyramids and hierarchies, and our language mirrored that of engineering. We described systems of command and control, management by exception. Even into the 1990s, we talked about "reengineering." It is clear to me that the empowering nature of networks is making it possible for natural ecosystems to evolve—in many cases absent human design and architecture. The desire to express one's self and to be heard is fundamental to human psychology, and IT is now making it possible for everyone to become a publisher or broadcaster.

The question for those of us who will be responsible for educating students in 2015, then, is how we position the institutions we serve within an ecosystem. Students will be further empowered and will increasingly expect to customize a curriculum (and a cocurriculum). In a cyber world in which someone else's educational offering is only "one click away," the challenges for educational administrators will be to create

educational policy that encourages this behavior in an academically responsible manner and a web of partnerships that behaves from the student's perspective like an ecosystem. Students will demand the ability to move seamlessly across disparate educational environments. Institutions that make this possible will prosper.

A second complex of issues that occupies more and more

of my thinking is that of authenticity and identity. We all know that on the Internet, "no one knows you're a dog." The challenge for educators in 2015 will be an extreme form of the challenge that has faced educators since Plato: how do we recognize authentic knowledge? As we all know, the Web is an extraordinary resource. We also know that it is littered with sources of information of varying quality and credibility. Critical thinking for 2015 and beyond will be more necessary than ever, and our faculty need to devise strategies, programs, and pedagogies that will help their students "seek truth" in environments that contain "multiple truths" at best.

**Calhoun:** It does become clearer every year that we have so much more to learn from natural systems than we ever thought. Diana, how about your look to the future? At some of the meetings we've both been at I've heard people talking about students "going to class at home and then going to campus to study and socialize."

**Oblinger:** I see many students being on campus because of the social and intellectual environment, but not tied to campus. I can see them linking to other institutions, other faculty, and other experts as the need or interest arises. This whole notion of distributed cognition—or the power of the network—will be a way of life. Technology will support much of what students and faculty do, but it won't be noticed. Learning will have become more active and engaged, with students taking more responsibility for their learning. And, competencies will be articulated and measured throughout college, so students know how they are doing and where they need to improve.

I also see that analytics will play a bigger role in higher education. Systems will be able to identify students who might be at risk and recommend appropriate interventions. We won't teach just the way we were taught; we'll have the opportunity to teach in ways that have been proven effective.

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**Calhoun:** Okay, I was hoping you'd get a little crazier, but those are important ideas, and when our readers think about them they'll realize that there's plenty of craziness embedded in getting to there.

**Oblinger:** Remember, you don't have to be crazy to be effective. If we put into practice the things we already know that matter, we'd be a big jump ahead of where we are today. Part of the point is that these changes aren't impossible or science fiction, they're doable.

**Calhoun:** What do you think our professional constituencies should be looking at as important new things to pay attention to between now and 2015? First, let's look at the future for business officers.

**Oblinger:** I mentioned analytics before. I think that applies to all kinds of things we do, in and out of the classroom. I believe we'll have better developed collaborations that provide for sharing of information and resources, such as buying cooperatives. And, I believe we will constantly focus on how to keep education affordable.

And then there is the question of assessment. I think this applies to business officers and all the rest of us in higher education. We need to be sure we're asking the right questions, but we need to be sure we are looking at results, not just our hopes or assumptions. But perhaps the hardest part is getting the questions right.

**Katz:** I believe that the conditions are ripe for a major economic storm on higher education's horizon. Enrollments are now set to decline, the federal budget deficit is breathtaking, and entitlement programs such as Medicare will crowd out spending for the National Science Foundation and the National Institutes of Health. This is a time when business officers must play critical roles. In particular, our business officers must help our institutions get serious about real process change. We can no longer afford to muddle through change incrementally, not if our institutions are going to continue to prosper. **Oblinger:** Space will be seen as having a key role in student and faculty success and in institutional pride, as well as in student and faculty recruitment. Facilities officers and planners will be continually changing space to capitalize on new insights and emerging needs. And, those decisions will be based on better information than ever before. I also think that "facilities" will broaden beyond just the physical to include virtual spaces.

**Calhoun:** Thanks for that observation. Even though it confuses the fact that a lot of IT on campus is not infrastructure per se, a lot of IT is infrastructure, and I personally am having more and more difficulty accepting, for example, phrases like "facilities planning." My eyes and ears want to see and hear "infrastructure planning." Your thoughts, Richard?

**Katz:** I'd love to see facilities officers develop real partnerships with CIOs. Not only do CIOs have the capacity to help facilities officers and planners design built learning environments, facilities officers have the potential to bring critical concepts and skills to the crafting of the institution's Web presence. It seems to me that techniques and practices such as architecture, program planning, long-range development planning, design-build, value engineering, and others have as much place in cyberspace as on our campuses. Drawing on the metaphor above, we need to begin thinking of professional ecosystems. Of course this ecosystem really depends on IT officers, business officers, facilities officers, and planning officers.

**Calhoun:** Richard, we should talk more often, because I also often wonder why there is so much of a disconnect. I'm going to share those words with my colleagues on UwebD, the college and university Web masters e-mail list; they are yet another group with a key role to play.

How about the people on campus, or consulting with campuses, who plan? These folks do planning of all kinds, physical/infrastructure planners, academic planners, IT planners, and budget and resource planners? Some of them have planning in their title; most do not. What should they be looking out for? **Oblinger:** Planners will pay even more attention to the external environment—particularly internationally. And, they will continually involve students in the planning process. Assessment will become a consistent part of the planning cycle—always looking at results and modifying, as necessary.

**Calhoun:** Indeed, I had dinner last night with one of SCUP's more senior consultant members, and he was describing the kinds of almost intimate things that students had been telling him in focus group meetings. There is quite a growing trend among our constituencies to eagerly learn more about who the students are.

Calhoun: How about facilities officers and managers?

**Oblinger:** And we are all going to have to think about how we ensure our institutions are agile. Changes come very rapidly. The challenge is how we maintain our historic mission while constantly adapting to the changes around us, whether that is public policy, technology, culture, or some other factor. **Katz:** Our planning systems need to move to what some label "the adaptive enterprise." The adaptive enterprise metaphor likens the enterprise to a living system and the planning process is one of "sensing and responding." We will need to develop information systems that imbed sensors everywhere and in everything and in which massive amounts of current information are streaming into planning systems on a 365-24-7 basis.

We need to develop models and simulations that will help us know in an instant when a student is at risk, when a business process is at risk, and so forth. We need a fabric of autonomous intervention systems so that information from sensors can trigger automatic interventions. So, for example, when a student fails an exam, an alert is sent to an academic advisor. This is a fundamentally new planning model and is both outrageously difficult and promising. Implementing the

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vision of a sense-and-respond adaptive organization will demand a real partnership between planners, facility managers, business officers, deans, IT, and others.

**Calhoun:** Richard, you're on a key Futures Panel that our readers will enjoy at "The Campus of the Future" conference. Have you given some thought yet to what you will say there? At what angle you might come at things?

**Katz:** No, you know me better than that! Actually, I'm thinking about this all of the time, but my thoughts won't gel until the time gets closer because I definitely want to peak in Hawai'i. This invitation is incredibly flattering and humbling. I promise to think really hard on this. And of course, I will plan to be provocative!

**Calhoun:** Well, Richard, I do know you well enough to know that what we'll hear from you will be provocative, entertaining, enlightening, and tailored to the great collection of campus teams that are heading to Hawai'i.

Thank you both so much for taking the time out of your very busy schedules to share these thoughts with the overlapping constituencies of APPA, NACUBO, and SCUP. Aloha!

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