Blackboard Moves Into Open Source p. 12 ■ Dialing for Donors p. 32

CAMPUS TECHNOLOGY
Empowering the World of Higher Education
June 2012

TECH FLEX

AT USC, A CAMPUSWIDE RENOVATION CREATES TECH-ENABLED LEARNING SPACES THAT EMPHASIZE FLEXIBILITY p. 18

+ 6 KEYS TO ENGAGING STUDENTS ONLINE p. 16

TRADITIONAL SCHOOLS EMBRACE ONLINE LEARNING p. 26

USC's computing center revamp, before (inset) and after

Volume 25 Number 10
campustechnology.com
1105 MEDIA

NetSupport

www.netsupportdna.com

Don't forget to download your FREE TRIAL

Campus-Wide IT Asset Management

Hardware Inventory – Licensing - Energy Monitoring – Alerting - Software Distribution - User Management
Metering - Real-time Reporting - Remote Control - Web-based Servicedesk

- IT Asset Management
- Web-based Servicedesk
- Remote Control for any Platform
- Powerful Desktop Alerting
- Desktop Security
- Classroom Management for Windows
- Classroom Monitoring for Mac & Linux

Without a comprehensive asset management program IT resources can become a drain on your overall budget. NetSupport DNA helps you recover costs by providing in real-time a snapshot of your entire IT infrastructure, helping you identify redundant assets and make informed decisions about the rollout of new technology. It will even highlight when machines are left powered on out-of-hours so you can reduce energy costs! Our downloadable Mobile Console app, compatible with Android phones and tablets, iPhone, iPad and iPod Touch will even give you access to accurate, real time asset data when you're on the move.

NetSupport DNA is guaranteed to maximize the return on your IT investment but the even better news is, as a modular solution, you can customize the functionality and purchase cost to your exact requirements.

w: www.netsupport-inc.com | e: corporate@netsupport-inc.com | t: 1-888-665-0808 (toll free)

Contents

vol. 25 no. 10 June 2012

In This Issue

Focus

32

Cover photo by Jay P. Morgan

26

Features

COVER STORY

Breaking Mobile Down

Institutions need to take a dual approach to their mobile strategies.

At an intriguing CT Forum in Long Beach, CA, last month, the issue of connectivity—wireless connectivity—played a prominent role. In an opening keynote, Larry Johnson, CEO of the New Media Consortium, laid out a compelling vision of a society whose technological underpinnings are so ubiquitous and reliable that consumers are no longer even aware of them. Just as we don't walk into a room and check to see whether it has electricity, he said, students of tomorrow—and some would say of today—will have the same expectation for wireless service.

As many of the sessions illustrated, however, many campuses are a long way from being able to deliver this kind of ubiquitous, five-nines service. Indeed, a lot of schools are reeling from the speed with which the BYOD wave has crashed onto their shores. In a presentation about Central Michigan University's efforts to manage the mobile tsunami, Network Manager Ryan Laus noted that the number of devices accessing his network daily has risen from 14,000 in April of 2011 to nearly 23,000 just a year later. And the tide is still coming in.

How schools handle this onslaught could have far-reaching repercussions for institutions. As student expectations rise, schools that fail to deliver may see their application numbers drop. Yet I sensed that many IT administrators at the conference were talking at cross-purposes.

For many participants, developing a mobile strategy wasn't about infrastructure at all—it was about deciding what kind of app to build and the services it should deliver. Certainly, this is an important component of a mobile strategy, but colleges and universities shouldn't see it as the alpha and omega. Listening to the conversations, it sounded to me as if a mobile strategy should have two main pillars: infrastructure on one hand, and services on the other. And how a school approaches each may be vastly different.

On the services side, Tim Flood, a consultant who used to work at Stanford, urged participants to dive right in without overthinking it. "Learn quickly and fail fast," he said. "The last thing you want to do is form a committee." He asserts that traditional higher ed governance is unable to cope with the speed of tech change. And I think he's right.

But I also think it would be a terrible mistake to apply a similar approach to wireless infrastructure. If students expect a seamless wireless experience, the last thing schools should do is cobble together a patchwork strategy. In fact, it's a slippery slope from there. An unreliable network leads students to create their own hot spots, degrading the network's performance even further.

Remember, the coolest campus app in the world is useless if the network can't deliver it to devices reliably. To that end, in our August issue, *CT* will take an in-depth look at just what it takes to build a robust mobile infrastructure. Please share your experiences with us. **CT**

—Andrew Barbour, Executive Editor
abarbour@1105media.com

CAMPUS TECHNOLOGY

campustechnology.com vol. 25 no. 10

REACHING THE STAFF
Staff may be reached via e-mail, telephone, fax, or mail. A list of editors and contact information is also available online at *campustechnology.com/pages/contact-us.aspx*.
E-MAIL: To e-mail any member of the staff, please use the following form: FirstinitialLastname@1105media.com.
CORPORATE OFFICE
(weekdays, 8:30 am to 5:30 pm, PT)
Telephone (818) 814-5200;
Fax (818) 734-1528
9201 Oakdale Avenue, Suite 101,
Chatsworth, CA 91311

CT Online

campustechnology.com

WEBINARS *campustechnology.com/webinars*

VDI: Success Stories From Massachusetts Maritime Academy and University of Connecticut
Faced with the need to expand computing resources without increasing IT costs, a growing number of institutions are considering virtual desktop infrastructure.

Reducing Waste on Campus: Controlling Your Printer Environment

How one institution not only saved money by reducing printer waste, but also ensured security for sensitive documents.

E-Text Strategies: Creating a Path to Digital
Indiana University shares the strategic, business, and policy issues institutions should consider before implementing an e-textbook initiative.

Gaining the Upper Hand on the Next-Generation Learning Space
Implement a computing architecture that powers virtualized data centers and private clouds.

Simplify Desktop Virtualization With a Zero Client Solution
Experts outline how to virtualize desktops within a Citrix environment.

Trending Articles on *CT*

- **The Price Is Right?** *campustechnology.com/0412_textbooks*
- **Rebuilding the LMS for the 21st Century** *campustechnology.com/0412_LMS*
- **Pros and Cons of Social Media in the Classroom** *campustechnology.com/0612_social*

Q&A

Mobile Relevance: Moving More Quickly on Implementation
The best advice for a campus mobile implementation may be to *just do it*. *campustechnology.com/0612_mobile*

Plus…

Follow us on Twitter:
twitter.com/campus_tech

Connect with us on Facebook:
facebook.com/campustechnology

Follow us on LinkedIn:
linkedin.com/today/campustechnology.com

Events Calendar

June 9 – 15
InfoComm 2012
infocommshow.org
Las Vegas

July 16 – 19
Campus Technology 2012
campustechnology.com/summer12
Boston

July 16 – 19
Association for Authentic, Experiential and Evidence-Based Learning
AAEEBL Annual Conference
aaeebl.org
Boston

campustechnology.com/calendar
To submit your event, e-mail editors@1105media.com.

1105 MEDIA Education Group

PRESIDENT AND GROUP PUBLISHER Wendy LaDuke

WEST COAST SALES DIRECTOR Mark D. Buchholz

EASTERN REGION SALES MANAGER M.F. Harmon

CENTRAL REGION SALES MANAGER Tom Creevy

SENIOR SALES ACCOUNT EXECUTIVE Jean Dellarobba

EVENT SALES DIRECTOR Patrick Gallagher

NATIONAL ACCOUNTS MANAGER, EVENTS Stephanie Chiavaras

EVENT SALES REPRESENTATIVE Deborah Carroll

MARKETING DIRECTOR Karen Barak

MARKETING DIRECTOR Michele Werner

SENIOR MANAGER, ATTENDEE MARKETING Athene Kovacic

CLIENT PROJECT COORDINATOR Jenna Horton

eMEDIA PROJECT COORDINATOR Mallory Bundy

ScanSnap

I'm productive.

Easily manage volumes of paperwork with the ScanSnap S1500 document scanner. With double-sided scanning and blazing speed (20 ppm @ 300dpi) you'll be processing morning paperwork before lunch, not during. You can scan a stack of mixed documents by pressing just one button. Scan to email, searchable PDF, JPEG, or applications like Word and Excel®. ScanSnap intelligent features such as automatic color, size, and orientation, together with Adobe Acrobat (included), help you manage paperwork like a professional so you can spend more time on life's other important matters. Like a well deserved lunch.

The reviews are in. Check out ScanSnap and see how we rate in 3 important areas. Visit http://Ez.com/camptech

FUJITSU

An Open Book

*In the April cover story "The Price Is Right?" (*campustechnology.com/0412_textbooks*), CT broke down the factors behind textbook and e-textbook pricing.*

Although this comprehensive article mentions open educational resources, it omits mention of the open model of Flat World Knowledge (for which I am an author), which offers the best of all worlds for students and instructors. Flat World makes its peer-reviewed textbooks available free online or via a variety of low-cost alternatives. Students can choose to read their book online, in print, on an e-reader, or in PDF form, and they can also opt for an audio copy. This provides them great flexibility and also saves them much, much money.
Steven Barkan
University of Maine
Comment posted at *campustechnology.com*

Big Publishing has no incentive to undercut its own profits by offering e-texts at significant savings (or with significant improvements) through its syndicate, CourseSmart. To compare print with this limited kind of "e-text" is misleading. The author buried the lead by waiting to raise open educational resources until the conclusion. Open, no-cost, and low-cost, truly customizable texts and resources may require a little more work on the part of the professoriat, but they hold the key to breaking the stranglehold of overpriced textbooks. The author concludes that it is "not likely" that there are "enough talented and motivated do-it-yourself faculty…to actually upend the economics of the textbook market." Does anyone else feel challenged as a professional to prove her final assumption wrong?
Miles McCrimmon
J. Sargeant Reynolds Community College
Comment posted at *campustechnology.com*

Beyond Google

*In the April issue's "Search Rescue" (*campustechnology.com/0412_library*), **Drexel University** (PA) librarian Jay Bhatt discussed innovative ways to move students—and faculty—past their reliance on Google.*

It is a very interesting thought to reimagine the library as it actually is, being defined by its purpose and function rather than by its physical composition. It puts into perspective just how much we need to have more refined and specified search methods than just Google. Using regular Google searching for scholarly research is like going to a library and using a search method in which you have to go through the easy-fiction section just as much as any other section, and even then you might not be able to root out all of the irrelevant data. Why, if I am doing civil engineering research, would I want my search results to include things from a biological text or site that kind of seemed relevant to the search engine?
Jacob Clouse
Comment posted at *campustechnology.com*

What's Holding Us Back?

*"Rebuilding the LMS for the 21st Century" (*campustechnology.com/0412_LMS*), also in the April issue, asked whether LMS systems can keep up with the needs of next-generation learning.*

There's something almost reactionary about these types of articles that claim that the standard LMS is limiting and walled off. Every LMS I've used provides student and instructor access to web links outside the LMS. What's to prevent an instructor from incorporating some of these web 2.0 tools with, say, a Blackboard or Desire2Learn course, as easily as any open source resource?
Anonymous
Comment posted at *campustechnology.com*

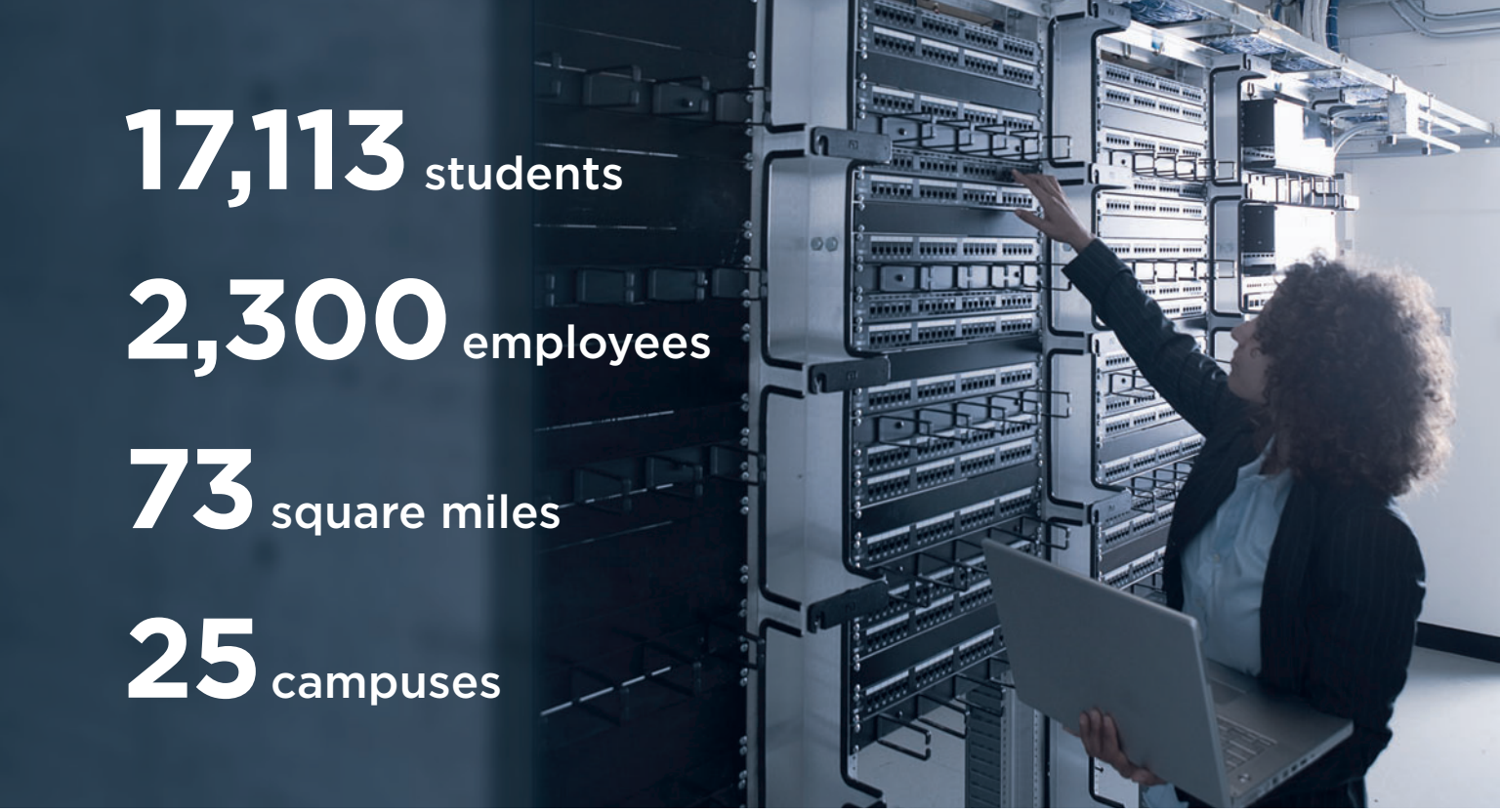
It seems education is lagging well behind even the most primitive LMS. For example, LMSs such as Moodle support adaptive learning in class, and Remote-Learner's ELIS add-on for Moodle supports adaptive learning paths. Students can take an assessment, complete an assignment or a set of assignments, be given credit for expertise they have already earned, and get delivered content that meets their current knowledge level, learning style, etc. Micro-content, personalized learning, credit for skills learned on the job or through independent study—the modern LMS supports all of these easily. But how many education institutions can support them with credit-granting and financial models? How many accreditation boards are ready to confer legitimacy on schools that use advanced, modern LMS features? Which schools have the bureaucracy in place to enable students to learn at their own pace? Perhaps the technology is not what is limiting.
Anonymous
Comment posted at *campustechnology.com*

Leave It to HR

*In CT's March issue, "Lawyer Up" (*campustechnology.com/0312_ITlaw*) identified the six biggest legal issues facing IT today.*

In many ways this article illustrates the real issue for CIOs on legal matters: Most legal issues are *not* IT issues. This is reflective of so many organizations forcing IT to administer non-IT policy matters just because there is a technology component. If an employee or student looks at porn, many think that is an IT issue when it is not. That's no different from bullying or other violations of acceptable use. And that is where the trouble begins. If IT issues an acceptable-use policy, then IT ends up owning it. But if you deal with it as ethics or code of conduct, then HR or Student Services owns it. CIOs need to avoid getting sucked into sticky situations just because nobody else wants to deal with them—by focusing on the behavior, not the vehicle through which it occurs.
Jerry
Wisconsin
Comment posted at *campustechnology.com*

E-mail us at *editors@campustechnology.com*, or join the conversation on the web at *campustechnology.com*. Letters are edited for length and clarity.



One Charter Business® Fiber Solution that offered a smart alternative to critical connection uptime.

When swelling bandwidth demands caused bottlenecks and interruptions, the Director of Technology Services at Eagle Mountain-Saginaw School District turned to Charter Business Fiber Solutions for a faster, scalable connection.

With a wholly owned, proactively monitored network backed by an enterprise support team 24/7, we have the intelligence to help schools, healthcare facilities, financial institutions and businesses of every size run at their best.

- Fiber Internet
- Data Networking
- Optical Ethernet
- Advanced Voice Solutions

Learn more about this story.

Charter Business

Charter-Business.com/Technology | 888.891.1598

Campus+Industry

TECHNOLOGY HAPPENINGS IN HIGHER EDUCATION

NEWS

VIRTUAL ORIENTATION. **Tiffin University** (OH) has partnered with Hobsons to deploy a virtual student-orientation program, starting with the school's distance-learning population. The system allows students to walk through orientation steps for such procedures as registration, scheduling, financial services, advisers' meetings, healthcare, and campus familiarity. Staff can track participation and flag students that may require supplemental information.

A SOCIAL ENGAGEMENT. **Virginia State University**'s Reginald F. Lewis School of Business is using GoingOn's Academic Engagement Network to enable easier, more meaningful interaction among students and faculty. Features of the system include: Community Builder, which creates customizable online communities with a drag-and-drop interface; Virtual Commons, which provides live streams of activities, events, and content; Campus Channel, which publishes materials to specific individuals or groups in online communities; and Identity & Network, which allows users to develop custom profiles and an integrated portfolio.

CHANNELING CONVERSATION. A redesign of **Golden Gate University**'s website home page now ties the California institution's various programs in with social media conversations. The new public-facing version went live on March 5 and features "conversation channels," provocative questions intended to spark discussion about what's going on in the classroom and in the broader region. To help members of the campus community shine, the website uses campus experts to present a particular issue, and encourages people to comment by following a specific hashtag on Twitter. Read more at *campustechnology.com/0612_goldengate*.

GOLDEN GATE U is using its website to generate social media conversations.

HOSTED RETENTION TOOL. As part of its effort to improve graduation and retention rates, **Becker College** (MA) has adopted a hosted early alert tool and case-management system from Starfish Retention Solutions. The Starfish system automatically generates progress surveys three times during the academic term that are then sent to faculty members for feedback on student performance. It has been configured to capture concerns about such factors as student behavior, low grades, and absence, and allows administrators to create "to do" items or reminders that notify students to submit their financial aid forms, complete their résumés, or attend career workshops. The college estimates that nearly 80 percent of its faculty has used the system since the beginning of the fall 2011 academic term. Read more at *campustechnology.com/0612_becker*.

AUGMENTED CAMPUS TOURS. Blackboard has added augmented reality (AR) to its Blackboard Mobile Central platform, giving college students the opportunity to take enhanced informational tours of their campus and surroundings. The first campuses to use the technology, which leverages the iPhone's camera, GPS, accelerometer, gyroscope, and compass, include **Central Washington University**, **North Dakota State College of Science**, and **The University of Arizona**. AR lets students use the iPhone to explore their campus, including moving through a dormitory complex or "even see[ing] a bus blocks away moving in real time," according to a company statement. The Blackboard AR application also lets users point their smartphones at campus buildings to learn the building's name, significance, hours of operation, and historical information.

BLACKBOARD'S new augmented reality app lets students use the iPhone to explore their campus.

WEB REVAMP. After a yearlong effort, **Georgia Southwestern State University** has overhauled its public website and added CM1, a content "marketing" system from Percussion Software, with the aim of involving more people across campus in content creation and editing. CM1 allows an organization to build a website with prebuilt widgets and gadgets. A drag-and-drop interface lets users create new templates, modify page layouts, integrate social media, and embed third-party web applications. Version 2, which launched in September 2011, adds blogging and RSS functions, uses tags and categories to encourage reuse of material, and includes "like" and commenting features to allow visitors to rate content. CT

For daily higher ed tech news, go to campustechnology.com/news

Begin your investment with quality equipment from a trusted brand. Special rates and services are available for education purchases.

Canon
imageANYWARE

www.usa.canon.com/educationsales
email: canonsales@sedintl.com • phone: 800-344-9862

The Empire Strikes a Deal?

The acquisition of Moodlerooms by Blackboard brings two archrivals under the same tent. Just what does Blackboard have in mind for open source education?

IN DISCUSSING the higher ed LMS market, pundits invariably fall back on *Star Wars* analogies: Blackboard is the all-powerful Empire waging a scorched-earth campaign against the struggling Rebel Alliance, made up of smaller competitors such as Desire2Learn, Moodle, Sakai, and Instructure. But not even Hollywood could dream up the kind of plot twist unveiled on March 26, when Blackboard announced the acquisition of Moodlerooms and NetSpot. That's like Darth Vader adopting Yoda and joining a bowling league with Obi-Wan Kenobi. Just what is going on here?

© Sunset Boulevard/Corbis

Certainly, Blackboard's acquisition of two major players in open source LMS services has set the education community buzzing. Moodlerooms is the developer of Joule, a custom version of Moodle, as well as a number of services to host and support Joule for other organizations. NetSpot manages Moodle operations—as well as Pearson's Equella Digital Repository and Mahara, an open source e-portfolio product—for education organizations in Australia, New Zealand, and Hong Kong.

But what has observers of the education sector truly gobsmacked is the company's approach to the acquisitions. In the past, Blackboard's strategy toward competitors could best be summed up by the old Microsoft philosophy of "extend, embrace, and extinguish." This time round, Blackboard is touting its intention of entering the open source business wholeheartedly. Indeed, the company announced that it has hired Charles Severance, the founding architect of the open source Sakai Project, and that it is launching Blackboard Education Open Source Services, with the goal of offering "a full range of services that support the use of open source technologies in education."

However, the company's foray into the open source market does not mean a pivot away from its flagship platform, Blackboard Learn. Indeed, Blackboard seems at pains to reassure customers of all its brands—new and old—that the sky is not falling. Clients of Moodlerooms and NetSpot, for example, have been told that there will be no changes to their leadership or business models. Interestingly, Blackboard even announced that its Angel LMS—acquired in 2009 and scheduled to be retired in 2014—will now be supported indefinitely.

What appears to be happening is that Blackboard is hedging its bets. Technology-research company Gartner sees Blackboard's move as a sign of maturity for open source LMSs. "When major providers take on service and support

Epson Brighter FUTURES®

HIGHER EDUCATION

EPSON HAS A TEAM ON CAMPUS.

Visit epson.com/higherEd

From serving as a trusted liaison with your preferred EPSON dealer to providing product demos, training, and answers to your planning and technical questions, the EPSON team will come to your campus to help you take full advantage of our exclusive Brighter Futures education programs and pricing.

We're a whole team of professionals focused on creating great relationships with the higher education community.

Thomas Hines
Austin, TX

Amy Kretsch
Minneapolis, MN

Gerry Campana
Ellicott City, MD

Barry Sugarman
Weston, FL

NEW BrightLink® Ultra-Short-Throw Interactive Projectors

Project an 87" diagonal image from less than 10" away, switch between sources (iPads®, Document Camera, VCR/DVD, iPhone®, and more) even without a computer and keep writing. Also includes dual pen capability.

EPSON®
EXCEED YOUR VISION

for open source applications, it is usually a sign of stability and general acceptance of the open source applications," wrote IT analyst Marti Harris in a research note. "In this case, there is business opportunity for Blackboard to support open source in education, rather than to try to limit or eliminate its growth."

Regardless of the merits of the acquisition, it has certainly made for some interesting bedmates. In a bid to secure his blessing for the union, Martin Dougiamas, founder and lead developer of Moodle, was courted by Blackboard President and CEO Michael Chasen, Blackboard Learn President Ray Henderson, and Moodlerooms CEO Lou Pugliese, who all made a pilgrimage to Australia to meet with him.

"The decision of Moodlerooms and NetSpot to work under Blackboard may sound very strange at first to anyone in this industry," said Dougiamas in a statement released by Blackboard. "But it's my understanding that these three companies have some good plans and synergies. I'm happy to say that Moodlerooms and NetSpot will remain Moodle Partners, and have promised to continue providing Moodle services, participating in the community, and contributing financially to Moodle exactly as they always have."

For his part, Henderson also recognizes the odd nature of his Australian trip. "It's fair to say, for all parties involved, it was a bit surreal—we'd been on opposite sides of the table before," he recalls. "We discussed the rationale for this [acquisition] and our commitment to building a services organization, ultimately with the goal of strengthening this community by a long-term contribution to it and helping grow it."

To publicly reinforce its commitment to the future of open source, the company released a statement of principles signed by those three executives, as well as NetSpot managing director Allan Christie and the newly hired Severance. These principles include promises to "support and honor the values of the communities we serve," continue with code contributions and support for open standards initiatives, and keep up financial support for the Moodle Trust and other open source organizations.

Lofty proclamations alone are not going to sway every educator who has had past dealings with Blackboard, however, particularly some Moodlerooms customers who find themselves back in the Blackboard fold.

Keystone College (PA), for example, is just now completing its transition to Moodlerooms' Joule platform from Blackboard. "I have mixed feelings on the acquisition of Moodlerooms by Blackboard," says Kurt Sussman, director of educational technology. "While the backing and resources of a large educational service provider could be beneficial to Moodlerooms and, ultimately, its customers, I am also concerned because dissatisfaction with the product and less-than-optimal customer service and support are why our institution moved from Blackboard to Moodlerooms in the first place." The Pennsylvania college expected to shut down its Blackboard server "for good" on May 31.

RESOURCES

For links to the vendors and organizations mentioned in this article, please visit ***campustechnology.com/0612_blackboard.***

It's a similar story at **Clackamas Community College** (OR). Following a spring pilot, the college began its migration from Blackboard onto Joule in summer 2010. Steve Beining, instructional designer and chair of the Distance Learning Department, recalls that he was surprised and worried when he heard about the acquisition. "It seemed to be incongruent with the marketing plans that I had heard of for Blackboard," he says.

Besides, he adds, "Anyone would have concerns about the sale of a company they've been working with for a couple of years: Will services change? Will prices change? Will they change the trouble ticket system? Will we lose the technicians who have been working with us?"

Moodlerooms hosts Clackamas' Joule implementation and provides storage space and security. The vendor also manages trouble tickets for IT support. While communications from Moodlerooms have been reassuring in the wake of the buyout, the original salesperson who worked with the college left within a month of the acquisition. "I don't know how that decision was made or whether it will directly impact our service levels, but he was somebody I liked working with, and now that person has gone," says Beining.

Since Clackamas is committed to Joule for the short term, Beining has this suggestion for its new owner: "Consider opening your other platform to be open source." Doing that, he explains, would resolve some of the controversy about Blackboard's patent battles with companies like Desire2Learn. "All of that would be settled if they just returned all of that intellectual property back into the open source world," notes Beining. "That, I think, would bring back some of the people who lost faith in the company over time."

At some point down the road, Beining's suggestion may not be too far off the mark. After all, in its newly released statement of principles, Blackboard's fifth and final promise is to deliver "innovative, visually elegant, and technologically robust education solutions to clients regardless of whether they are open source, proprietary, or a blend between them." **CT**

Dian Schaffhauser *is a senior contributing editor of* Campus Technology.

ONLINE EXCLUSIVE

In an in-depth interview with *CT*, Ray Henderson, president of Blackboard Learn, and Lou Pugliese, chairman and CEO of Moodlerooms, explain the rationale behind Blackboard's acquisition of Moodlerooms and NetSpot.

campustechnology.com/0312_bbinterview

SPECIAL ADVERTISING SECTION

CAMPUS TECHNOLOGY Focus

Software Helps Identify Academic Risks Early, Boosts Retention

Catching potential problems with attendance or grades early in a semester is key to helping at-risk students stay in school and succeed. Yet flagging problems early can be tough. Instructors are busy, and without formal methods for tracking high-risk behaviors, failing students can simply drift away and drop out, wasting student and faculty time and costing schools revenue.

Administrators at Mid-South Community College in Arkansas wanted to identify and reach out to high-risk students early—well before they reach the point of drop out. Testing beta software from CampusCruiser called Academic Alert, the school, which has some 2,000 students, tracked roughly 30 of its student athletes for attendance problems. The goal, said Melissa Cox Powers, coordinator of instructional technology at Mid-South, was to find attendance patterns that might indicate a problem. Athletes were chosen at the suggestion of the dean of students, who also oversees the college's sports program. These students were the first cohort to be tracked using the Academic Alert system.

MSCC worked with CampusCruiser, whose LMS and portal software is also in use at the school; MSCC made suggestions and offered feedback during the beta process. One request: Powers specifically asked that the alert software be able to flag not just two missed classes, but two missed classes in a row. That particular pattern, she said, can be a red flag for failure, whereas two non-consecutive missed classes can often be explained.

Mid-South is also using Academic Alert to identify potential financial aid issues. If a student doesn't attend a class for the first 11 days, Powers explains, that student can be dropped from the class. Also, that student may have to pay back part of his or her tuition before being able to continue with the semester.

While the software provides quick reports on students that may be heading for trouble, how and when to contact them is still left up to MSCC instructors—they can use Academic Alert to send an automated email, craft a more personal message, or make a phone call.

A common problem in tracking retention data without the help of technology is that the problems arise and multiply faster than the paper trail can keep up. For example, at Northeast Iowa Community College, students with problem grades, attendance or behavior were noted by the instructor on a paper form, which was then forwarded to the academic dean. Predictably, the process was slow, students often fell through the cracks, and catching patterns early was difficult, at best. The school turned to Academic Alert to help them respond to student data in real time and improve their retention rates.

"It all comes back to faculty intervention. Catching [problems] early in the process is critical," explained Christopher Ostwinkle, director of distance learning at the college, which serves about 5,000 students across eight mostly rural counties. "The chances of students [with poor grades or attendance] catching up by midterm is very low."

The college wanted faculty to remain as the first line of intervention with students, Ostwinkle said. So when NICC began to beta-test the new software from CampusCruiser, which also supplies its LMS and portal products, NICC made sure that, although the software could be set up at an administrative level, faculty would remain in charge of how the product was used for their classes, following their own policies on when to contact a student about a potential problem.

NICC has been testing Academic Alert since mid-2011. Like all CampusCruiser software, Academic Alert is Software-as-a-Service, meaning CampusCruiser hosts and supports the software. NICC is using it with select online classes to monitor grade patterns, and plans to gradually roll the software out to the entire college, including online students.

CampusCruiser executives said they developed the new software after realizing that, with retention a growing concern on college campuses, the sort of rich data needed to pinpoint student problems early was already available in CampusCruiser LMS and Portal products. Data on class attendance, quiz and test grades, how often students log in to various parts of the software, such as online chat rooms, and fulfillment of assignments—all useful indicators of student performance—can be tracked in the LMS or through the portal. Thus, it seemed an obvious step to develop an automated system that would help colleges leverage that data to foster early intervention efforts, and boost retention.

With several colleges having helped to fine-tune and beta-test the software, CampusCruiser is now shipping Academic Alert.

For more information on how your school can take advantage of an affordable LMS with reliable, always-on customer service, visit CampusCruiser online http://www.campuscruiser.com/ or contact them at 877.450.9482.

CampusCruiser
9 Law Drive
Fairfield, NJ 07004

6 Keys to Engaging Students Online

While some instructors think online teaching will be a breeze, the truth is that the best teachers work really hard to connect with students. *CT* shares tips from an insider.

IN RECENT INTAKE interviews with new students of education at **West Texas A&M University**, I found that teaching online is the new holy grail for many young educators. They dream about how wonderful it would be to work from home in their bunny slippers and to conduct meaningful interactions with students via Skype while preparing dinner. To this group, teaching online means never having to be anywhere at any particular time, never having to wear uncomfortable "professional clothes," and never being asked a question without having time to research the answer.

Shutterstock.com

After two decades in online teaching in both the corporate world and higher education, I regret to report that the grass is not necessarily greener on the other side of a network connection. While online teaching offers many rewards for instructors, it takes a special set of skills and attitudes to excel at it. And these are emphatically *not* the same skills and attitudes that make an exceptional classroom teacher. Here's what it takes to be a successful online teacher:

1) Don't Expect Constant Validation

While it may be heretical to say it, many teachers are attracted to the profession by all the ego-stroking they hope to receive. They remember the worshipful glances that they bestowed on their favorite professors, and now they want to earn their share. But there is a world of difference between a warm face-to-face encounter and an e-mail—no matter how appreciative it might be. While there has been much discussion about how e-mail or even video interaction might not meet students' emotional and security needs, the emotional vacuum on the professor's side has gone largely unnoticed. Online teaching actually requires a much higher level of emotional security and confidence in one's own professional competence.

2) Work Hard to Know Your Students

It's hardly news that a great deal of human communication involves body language—anyone who's sat through a phone conference can attest to that. Remove voice communication as well, and the chances of misunderstanding increase exponentially. It takes an enormous amount of time and effort on the part of online teachers to make sure they are really clear in their written communications, as well as to understand who they are teaching, what students are trying to tell them, and how well their students are succeeding in each course.

In my online classes, I find myself constantly at risk of

wildly misjudging both people and their situations. I have had students whom I have mentally pigeonholed as headed for the dustbin—lacking both ability and enthusiasm—only to discover that they are top-notch performers who simply took a while to get the hang of the online system.

Several semesters ago, I was strongly tempted to ease one particular student out of the program. Her native language was Chinese, and I had concluded from her written work that she did not understand English well enough to pass. She soon taught me that reading comprehension and writing skill grow at dramatically different rates. Today, she is a stay-at-home mother making a good living by remotely providing webmaster services to three small colleges.

3) Accept the Loss of Complete Control

Many teachers thrive in the emotional sphere I call "command mentality." Like an orchestra conductor, they love the sense of control that comes with being in charge. They take this responsibility very seriously, and work like demons to get it right. They make sure every student is crystal clear on what is expected of them and the consequences of failing to meet those expectations. These are the instructors who adore grading rubrics.

For better or worse, fully online instruction can never provide the level of control they crave. To a great extent, online education operates on the honor system. You never know who is really doing the work on the other end of the wire. There is no combination of tightly timed tests, double-password protection systems, or retina-scanning identification gizmos that can change this reality. The knee-jerk reaction to this observation is to point out that students cheat in regular classroom courses, too. That's true, but not nearly as easily and, quite possibly, not nearly as frequently.

If you are confident that you can make a compelling case to your students about the satisfaction and benefits that derive from completing their courses legitimately, you have a future in online education. If you are comfortable only with more coercive methods of extracting effort from students, you need to rethink your game for this new environment.

4) Be Prepared to Work Really Hard

Quality classroom teachers succeed by absorbing oral and visual feedback from each class session as it unfolds, and making moment-to-moment adjustments in response. Except for a small minority of instructors working with expensive synchronous learning systems that provide continuous one-to-many visual and auditory communication, online teachers don't have the luxury of making real-time modifications to their instructional strategies. Their teaching must be accurate, complete, and spot-on right out of the chute.

Most of my courses require that I make about 16 hours of technology-demonstration movies. Because I know my students so well, I never settle for the often-perfunctory movies that come with the textbooks. Instead, I tailor my movies to the specific interests of my students and to my ever-emerging understanding of where they are likely to stumble and fall. To do so involves a lot of work: It takes me at least 20 to 30 hours of effort to create one hour of video.

And most of this work has to be done before the course even gets under way. Some of my students live in towns so small that they might have just a couple of traffic lights. They have dicey internet service and personal hardware, which make downloading hourlong movies problematic.

To overcome this, I mail each student a DVD a week before school starts, which means that I have to complete my preparations for the entire semester before it even begins. Between preparation, correspondence, and time-consuming troubleshooting of student problems, I estimate that I put in 50 percent more effort in teaching technical courses online than I would teaching the same material in person.

5) It's Not Just a Day Job

Teaching online is less a job than a lifestyle. Committed online instructors find it hard to set reasonable boundaries on the workday. When students run into trouble, the instinct is to help them as soon as you can. Since many online students have full-time jobs, this tends to happen a lot between 10 p.m. and midnight.

6) Don't Become Isolated

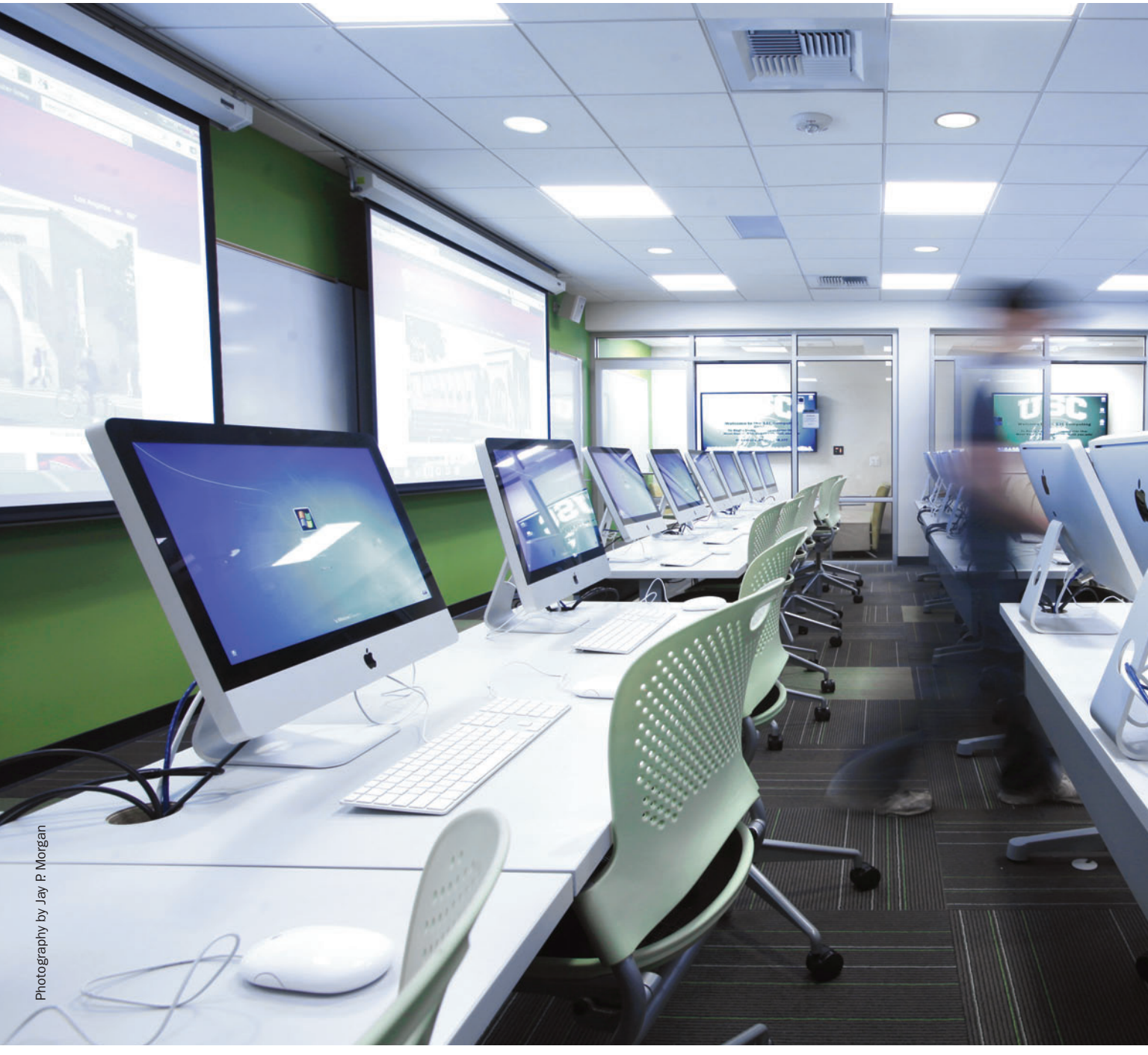
Online teachers need to work hard to maintain the kind of peer relationships that on-campus teachers consider normal. This should not be considered a personal failing: It comes with the territory. My colleagues who teach in person maintain on-campus office hours to serve their students. As a result, they spend time in the department and in contact with each other. My students, on the other hand, are scattered all over the state of Texas—it would make no sense for me to keep regular on-campus office hours.

The good news is that online teachers remain blissfully unaware of watercooler politics. The bad news is that, if they're not careful, online instructors can become seriously out of touch with the ethos of their workplace. CT

In my online classes, I find myself constantly at risk of wildly misjudging both people and their situations.

Richard Rose *is the program chairman for instructional technology and design at West Texas A&M University.*

TECH



Photography by Jay P. Morgan

FLEX

At USC, an ambitious campuswide renovation aims to create tech-enabled learning spaces that place a premium on flexibility. **By Jennifer Demski**

ON MANY college campuses, the 21st century classroom is the exception rather than the norm. Here's what usually happens: A forward-thinking administrator pushes for a pilot program to redesign a handful of classrooms. The resulting learning spaces are cutting edge and successful—in high demand among faculty and students alike. And that's as far as the program goes. The vast majority of traditional classrooms on campus remain untouched.

OPPOSITE: The main instructional area of the Project-Based Learning Space BELOW: The space previously served as a traditional computer lab.

It's the kind of false dawn that the **University of Southern California** is determined to avoid. The campus is three years into an initiative intended to remodel all 210 general-access learning spaces within five years. And the initiative won't stop there.

"It's an ongoing project with no real end in sight," explains Joseph Cevetello, director of learning environments for the technology-enhanced learning group (TEL) in the Department of Information Technology Services. "We're going to continuously look to upgrade, refresh, and make sure that our learning spaces are appropriate to our student body and the kind of teaching that our faculty is doing."

As of April, renovations had been completed on 110 classrooms, including spaces in each of USC's three computing centers, and four of the campus's 20 auditoriums. During the summer, an additional 55 classrooms and five auditoriums will be redone. "All 210 spaces in this remodeling initiative reside in existing buildings that were constructed when ideas about what classrooms should be were very different from what we want today," remarks Cevetello.

GLASS-WALLED, sound-isolated rooms provide space for small-group collaboration, complete with comfortable furniture, tables, and large displays.

In fact, determining exactly what end users expect from today's classrooms is a key component of the process. "Before we touch a wall or change any furniture or technology, we spend about six months just meeting with faculty and students to understand their needs," explains Cevetello. "We're really focused on evidence-based design."

As teaching styles and technology evolve, these surveys and discussions provide new data, enabling the TEL group to change course throughout the initiative. Here, *CT* examines how USC has used that data to make design choices for three key types of general-access space: computer labs, classrooms, and auditoriums.

Instructional Computer Labs

The three teaching spaces in the Salvatori Computer Science Center were among the first to be renovated on campus. Before work began, the spaces were set up as traditional computer labs with rows of desktop computers and immovable furniture. When Cevetello met with faculty to discuss a redesign, a group of computer science professors expressed a desire to be able to transition easily between large-group instruction and project-based, small-group collaboration. This request inspired the creation of the Project-Based Learning Space.

The Project-Based Learning Space features a main instructional area with a

continued on page 24

GRANTING A WISH FOR TECH-SAVVY FACULTY

NO MATTER HOW flexible and tech-enabled, a classroom is just one more traditional learning space if faculty aren't trained how to use the new technologies as part of their teaching. So, in conjunction with its classroom-remodeling initiative, the **University of Southern California** created a Teaching With Technology (TWT) grant program to encourage faculty to incorporate new technology into their curricula.

The competitive grant program is managed by the school's Center for Scholarly Technology, whose primary role is to support faculty use of technology for both curricular and classroom-management purposes. To apply for a grant, faculty must submit a proposal on how they'd like to integrate technology into their curriculum in a new way. The Center for Scholarly Technology then supports grant recipients as they determine best practices for incorporating the proposed technology into their curriculum.

As part of the requirements, grant recipients must then help the technology-enhanced learning group (TEL) collect data about the impact of the technology on their teaching, and solicit feedback from students on how the technology has supported their learning. Since the program's inception in 2007, 55 faculty members have won the highly competitive TWT grants, which range between $10,000 and $35,000.

"We've been able to collect a lot of great data on successful uses of technology in these spaces," explains Joseph Cevetello, director of learning environments for the TEL group in the Department of Information Technology Services. "This grant program has been incredibly effective in making sure that our faculty have access to the tools and support they need to be able to take advantage of these new learning spaces."

Even the wide body fits.

With a wing span of nearly 200 feet, even the model of this wide body jetliner is huge. But the SDP-960 can handle it. With its jumbo 16.5" x 11.7" shooting area, the 960 is perfect for presenting oversized objects or documents to large audiences with incredible detail.

- 1.39M CMOS offers resolutions of SXGA/WXGA/720P and more
- Full motion 30fps at all light levels and magnifications
- Optical Glass 48x AF Zoom Lens (6x optical + 8x digital)
- SD & USB capture: Take images/record & playback videos with audio
- Built-in preview monitor of live images even when using image freeze
- Use as a webcam with Skype® and lecture capture products

Great styling that folds down to 2.6" flat for easy storage

www.SamsungHigherEd.com
1-877-213-1222 ext 3306

SAMSUNG

Five Keys to 21st Century Learning

Leadership Insights on Issues in Educational Technology

The latest trends in data analytics, learning infrastructure, and the drive for student success present new challenges for campus administrators and technologists. What practices and technologies should campuses implement to support 21st century learning? *Campus Technology* spoke with two higher education leaders to gain their insight.

Big data is a hot topic on today's campuses. The aggregation and analysis of large amounts of data in university systems present both a challenge and an immense opportunity to impact student success. What do university leaders need to know about data analytics and data management to improve student outcomes and meet institutional goals?

MEET THE CONTRIBUTORS

John Campbell, associate vice president for academic technologies, Purdue University

Phil Ice, vice president of research and development, American Public University System

John Mullen, vice president and general manager, Education, State and Local Government, Dell

PHIL ICE: University leaders need to be aware of two primary issues when thinking about the role of big data in their institutions. First, the aggregation of data is far more difficult than the analysis. While much has been made of sophisticated methodologies for predicting factors that influence student success and retention, even basic statistical techniques can yield enough information to keep administrators and advisors busy for years. The real challenge is to federate the disparate data sets that exist across the university. Siloed data stacks and turf battles over who owns data make meaningful analysis extremely difficult at most institutions.

TECHNOLOGY INSIGHT FROM DELL: Virtually every aspect of the education system generates data. And when used effectively, we know that it has the potential to pinpoint effective teaching strategies and interventions, as well as enable increased accountability and transparency. It even has the potential to help reach students from the moment they express interest in attending a school to retaining them throughout their education and onto becoming alumni. However, we know that acquiring the rich data is just one part of the process. We must also incorporate sound data management and governance strategies that will accompany the proper knowledge transfer to empower university leaders and faculty in critical decision making processes. By understanding how to effectively collect, store, analyze, and share many different types of data—including new data and metadata types such as social media and social collaboration activity data—institutions can develop predictive analytics, combine it with traditional education intelligence, and turn it into actionable knowledge...

Read Dell's complete response by visiting campustechnology.com/dell.

What role does infrastructure—particularly networking and storage—play in providing a platform that enables 21st century learning?

JOHN CAMPBELL: Since the mid-1970s, with the introduction of the first personal computers, the promise of computer-assisted learning has focused on the ownership of a particular device running a particular application. Today's learning platforms need to focus on learner mobility—students being able to actively engage on topics from whatever device they are currently using (phone, tablet, or computer), wherever they are located. This approach requires new storage and networking solutions that include ubiquitous access and adaptability to the nature of the workload. Learners need to be able to create, manage, and reform collaborative groups that might include people inside and outside formal learning organizations. Faculty members need environments in which they can provide mentoring and feedback captured on different devices, but stored in a larger learning portfolio. The challenge not only includes the "quantity" of the service (i.e., bandwidth and storage), but the security and access mechanisms for students to share, create, and collaborate across many different types of users (e.g., peers at their institution, informal colleagues around the world, etc.).

For more information and to download the full report, please visit Dell's Resource Center at *campustechnology.com/dell*

TECHNOLOGY INSIGHT FROM DELL: Digital content is changing the landscape of learning, enabling learning to now take place beyond a lecture hall or even a campus—on any day and at any time. We also know that digital content means increased data that needs to be stored and accessed electronically. This is driving requirements for universities to take a hard look at their storage and data access capabilities. Students, faculty, and staff expect easy, fast access to digital content. All the while, universities also need to provide secure access from a broad range of computers and mobile devices that also safeguards privileged information...

Read Dell's complete response by visiting campustechnology.com/dell.

Certain technologies—like lecture capture—are emerging as key to a 21st century learning platform. What are some innovative ways that campuses can use lecture capture to step up the teaching and learning experience?

CAMPBELL: Many campuses are exploring the "flipped" classroom approach to improve student success (*blogs.itap.purdue.edu/learning/2012/02/24/flippedclassroom*). Lectures are captured by

the faculty member [outside of class] and made available to students online. Students can review the content, take notes, and sometimes take a small quiz to check for understanding. During the "traditional" classroom time, students focus on solving problems as individuals and in small groups. This provides a period of active engagement where the faculty can provide guidance on misconceptions or difficult concepts. The "flipped classroom" approach focuses on integrating a number of Chickering and Gamson's *Seven Principles of Good Practice*, including improving student-to-faculty and student-to-student interactions, and providing prompt feedback. Many institutions that have explored the flipped classroom approach have found better learning gains compared to typical lecture approaches. Lecture capture is one technology that can provide the basis for this approach.

TECHNOLOGY INSIGHT FROM DELL: Lecture capture enhances and extends existing instructional activities, whether in face-to-face, online, or blended learning environments. It works especially well in subject areas where students can benefit from recast viewing for remediation, as when complex information is discussed or formulas are written on a board. The video-on-demand portion of lecture capture allows students to closely examine the steps of a demonstrated procedure or stop and focus on important actions often found in complex discussions, such as explaining math algorithms or science experiments. Lecture capture may enable freer thinking—students who find themselves struck by a particular comment or point can pursue that line of thought, confident that the lecture itself can be reviewed later...
Read Dell's complete response by visiting campustechnology.com/dell.

Students are arriving on campus with diverse learning styles and needs. Yet the process for identifying, acquiring, and supporting tools for accessibility puts pressure on a university's infrastructure and manpower. How do you currently provide accessible technologies for your students?

ICE: We are a fully online institution. Therefore, students must possess the required technologies to enroll with us. As part of our admissions process we provide guidelines on how systems may be optimized for access. However, ultimately students must ensure that the devices they use to access their courses are appropriately configured. That said, we are engaging in a number of initiatives that are geared at making content platform-agnostic. This process utilizes a variety of technologies to detect the device type and OS that a student is using, and then serves content up in an appropriate fashion. Admittedly, we are not yet at platform neutrality, but we are diligently working not only on the technical side of this problem but also on the design side vis-a-vis form-factor optimization. Providing content in a consumable manner does not mean it will be effective. To ensure meaningful impact, extensive UI/UX testing—grounded in cognitive psychology—must occur.

TECHNOLOGY INSIGHT FROM DELL: We believe that every student can learn and should have the support and means to reach their full potential. Many times technology can be an integral piece of this support. Text-to-speech software, closed captioning, magnifying screens, and touch-screen monitors help students engage on campus and everyday life activities by facilitating communication and enabling access to the world around them. We do know that making sure you have a best-in-breed set of technology on your campus can sometimes be a challenging process. From making sure you have the proper planning and management to streamline the process to learning how to use it in ways that benefit each student's unique needs. To obtain the right mix of special hardware and software, we also know that your faculty must manage a procurement process that involves multiple purchase orders to different vendors...
Read Dell's complete response by visiting campustechnology.com/dell.

Higher education faculty members are increasingly taking on a bigger role to ensure that the institution meets its learning outcomes. What kinds of professional tools, student engagement strategies, and resources do faculty need to be on top of student achievement?

CAMPBELL: Faculty members are a critical piece to implementing new approaches that improve student success. Institutions should consider launching projects that focus on course transformation, such as Purdue's IMPACT project (*purdue.edu/impact*). By bringing together staff with educational technology, instructional design, library, distance education, and assessment backgrounds, institutions provide faculty with the support framework needed to design, implement, and measure changes based on new approaches. The time and support focused on student success is essential for producing sustainable change throughout the institution. In addition, as information technology leaders, we need to explore new methods that support and empower faculty members to make new changes. This might include introducing new approaches from other institutions or developing new technologies such as the work done by the Purdue Studio (*itap.purdue.edu/studio*).

TECHNOLOGY INSIGHT FROM DELL: When students are provided with opportunities to interact with each other in a variety of ways, their learning is enhanced. Many exciting applications of information technology in schools validate that new technology-based models of teaching and learning have the power to dramatically improve educational outcomes. The key question is how to scale-up the scattered, successful "islands of innovation" that instructional technology has empowered into the universal improvements that have been enabled by major shifts in standard educational practices, including those solutions that enable innovation in curriculum...
Read Dell's complete response by visiting campustechnology.com/dell.

**** Participation in this interview does not imply endorsement of Dell.***

continued from page 20

bank of 31 iMac computers, surrounded by glass-walled, sound-isolated rooms intended for small-group collaboration. Inside these smaller rooms are comfortable furniture, tables, and large displays. Faculty and students can control the 12 displays in the Project-Based Learning Space—and throughout the computing centers—by downloading a free ClassBot client to their computers.

The goal was to provide maximum instructional flexibility. "If a faculty member only needs the main instructional space, we can allow informal learning to happen in the soundproof collaborative spaces without disturbing the class," notes Cevetello. "Informal and formal learning can coexist."

Student computing habits also played a role in the redesign of the computing centers. About 98 percent of USC's first-year students come to college with their own computers, of which about 80 percent are laptops. Yet those laptops weren't being used on campus. "When I was talking to our students and observing them, it became clear to me that they didn't bring their laptops to campus with them," says Cevetello, explaining that students tend to leave them in their dorms. "When I asked them why, more often than not the reason they gave was that there was no power." To address this issue, raised floors with multiple power outlets were installed in all the computing centers.

The second renovated learning area in the Salvatori Computer Science Center is the Mobile Learning Space. There are no desktop computers, just a cart of loaner laptops for students who are unable to bring their own computers to class. All of the furniture is movable and modular, and the power supplies in the raised floors increase the flexibility of the space even further. The room features four displays that are controlled through the ClassBot client on faculty and student computers.

"For faculty that do a lot of collaborative work, it's so easy to have students get up, roll the furniture into a new configuration, put their laptops down, and get back to work," explains Cevetello. For faculty who prefer a traditional setup, a third instructional space features 36 iMacs that face the front of the room.

To facilitate student use of their own computers on campus, a wireless printing solution allows students to print documents directly from their laptops while logged into the campus wireless network. Students pick up their documents at any of three campus computing centers, where they simply swipe their student ID cards. These changes have allowed USC to reduce the number of desktop computers in the computing centers by 35 percent.

Students can also reserve one of 17 collaborative spaces with lounge seating and large displays that were added to the computing centers to aid informal, small-group learning. "We really tried to make these computing centers places where students could hang out, use their personal laptops, and collaborate in groups," says Cevetello. "It's been wildly popular. The students love it. These spaces are almost always busy."

Classrooms

Unfortunately, there's no cookie-cutter approach to remodeling an entire cam-

RESOURCES

For links to the products and vendors mentioned in this article, please visit *campustechnology.com/0612_usc*.

TECH AT A GLANCE

THE REDESIGN OF USC'S learning spaces has involved the purchase and installation of a wide range of equipment. Below, *CT* highlights the key technologies in each of the three primary areas. For a look at the equipment installed in individual rooms, visit USC's Room Finder at *usc.edu/its/spaces/room_finder*.

COMPUTING CENTERS

Computers: Dual-booted MacBook Pros, running both Mac OS X and Windows 7
Displays: Sharp 60-inch PN-E601 1080p LCD displays, with analog and digital inputs and protective glass
Digital Signage: Visix digital signage application and door panels for displaying scheduled events
Collaboration Software: TeamSpot and ClassSpot from Tidebreak

CLASSROOMS

Displays: Sharp 60-inch PN-E601 displays with protective glass
Projectors: 16:10 is the standard projection format, with 3,000 lumens and WXGA resolution as the minimum performance standards. USC utilizes both DLP and LCD technologies, with no set technology standard: The school supports Epson, Panasonic, Mitsubishi, Christie, and others.
Furniture: Herman Miller flip-top tables

AUDITORIUMS

Tri-Projector System: Single-chip DLP, 6,000-lumen projectors (model DWU-670-E) from Christie
Lecterns: Custom-designed lecterns include annotation capabilities provided through Extron's Annotator, an annotation graphics processor, in conjunction with a 3M multitouch display on an Ergotron arm.

MULTIMEDIA OPERATIONS MANAGEMENT SYSTEM (MOMS)

This is a proprietary system developed by USC. However, the system uses Extron GlobalViewer Enterprise software to collect usage data and statistics.

pus's worth of classrooms. Depending on when they were built, classrooms can differ in multiple ways. So, in addition to considering student and faculty feedback, the TEL group had to team up with architects to determine what could happen in each room.

"In most institutions where I've worked or consulted, there's usually this idea that you get this one thing in the classroom and that's it," notes Cevetello. "Here, we really tried to think more about what each environment would warrant."

Because general-access learning spaces must fit the needs of various disciplines, the underlying goal behind the redesign is to provide end users with as much choice as possible. "What's the maximum amount of flexibility we can put in a classroom without making it totally unworkable?" says Cevetello of his team's approach. "We're constantly trying out different furniture designs to see what's going to be the most comfortable and flexible option for our students and faculty."

Each remodeled classroom currently features highly movable and flexible furniture. The tops of the square tables can be flipped into a vertical position for easy storage, for example, and all of the chairs are on wheels. And, as in the computing center, easily accessible and plentiful power outlets are key. "Some of these classrooms are 60 years old," says Cevetello, "so it was a challenge to bring in power, but we did it."

Depending on its layout, each classroom features between one and four displays, connected to USC's proprietary Multimedia Operations Management System (MOMS). MOMS allows IT staff to control and troubleshoot classroom systems remotely. It also allows IT staff to gather data on how faculty are using technology in the classroom, something which has proven extremely valuable in directing—and redirecting—the school's ongoing renovations.

"The initial set of 53 classrooms that we remodeled all had a standardized MOMS system," recalls Cevetello. "No sooner did we complete that renovation than iPads came out, and faculty also wanted to use PlayStations in the classrooms. It became clear to us through the data that our traditional input and signal path was not going to accommodate all of that, so we put more digital inputs and HDMI connections in our next group of classrooms."

EACH REMODELED AUDITORIUM features tri-projection capabilities, allowing content to be streamed from either a single feed or three different feeds onto three separate screens.

So far, Cevetello has gotten positive feedback from faculty on the classroom redesign—even from faculty who prefer to teach in a more traditional style. "To me, that was key," remarks Cevetello. "I want everything that we do to be ubiquitous but not intrusive. I want to be sure that our faculty can do what they need to do, whether that's not using any technology at all, or using four screens to project simultaneous Twitter feeds on what students are up to. We should be able to adapt to and support all of that."

Auditoriums

By fall, nine of the campus's 20 auditoriums will have been remodeled. The focus is on updating the technology. Each new space, for example, now has tri-projection capabilities, allowing content to be streamed from either a single feed or three different feeds onto three separate screens. Professors have the ability to annotate the images projected on the screens, and also to capture and project notes that they've written on whiteboards and blackboards. To help make all of this possible, the infrastructure in each auditorium has been upgraded from an analog switching system to a digital control path.

For the 11 remaining auditoriums, Cevetello and the TEL team are exploring ways to create traditional lecture halls that adapt to enable collaborative work, akin to the Project-Based Learning Space in the Salvatori Computer Science Center. In addition to requesting proposals from architects and furniture companies, the TEL team is holding a design competition for students in USC's School of Architecture: The winning group of students will work on the redesign with the architects whose proposal is selected.

"The collaborative lecture hall competition is a really great example of how we can use this classroom-upgrade initiative as both a teaching and learning experience for our students," notes Cevetello, "giving our students some great real-world experience while also taking advantage of the resources of our schools." **CT**

Jennifer Demski is a freelance writer based in Brooklyn, NY.

Jon Reinfurt

As demand rises—and technology and course design improve—traditional brick-and-mortar schools are appealing to a new population of online learners. **By John K. Waters**

GOING THE DISTANCE

WHOEVER SAID "Distance education begins in the 10th row" was taking a jab at the comatose kids at the back of his classroom, but the comment also taps into the old image of distance learners as disengaged themselves. That was then. Today, distance-learning programs are booming, in part due to demographic realities but also because recent advances in online technologies have markedly improved the distance-learning experience. What once was the province of isolated students in far-off outposts has morphed into learning systems that are increasingly seen not only as a rival to face-to-face instruction but also as a valuable complement.

Indeed, the time has probably come to retire the term "distance learning." Today, online courses are, in some cases, as relevant to students living on campus as they are to learners in remote locations. And for those students not on campus, the appeal of online learning has as much to do with scheduling as it does with distance. The majority of online learners today are not traditional college-age students—they work, have families—and flexibility is of paramount importance.

Not surprisingly then, many new online programs are focusing on postgraduate studies. What is different, though, is that many of these new entrants are brand-name, brick-and-mortar universities that are prepared to stake their reputations on their programs. Certainly, it's not a decision to be taken lightly. After all, criticism about the academic value of for-profit online degrees has generated big headlines in the past couple of years. However, the new entrants believe that if they maintain the same instructional quality online as they do on campus, prospective students will discern and appreciate the difference.

"We, or any university, cannot risk putting something out that would damage or cheapen our brand," explains Don Chaney, assistant dean for distance education and outreach in the College of Health and Human Performance at the **University of Florida**. "Our online programs at UF have exactly the same entrance requirements, internship rules, et cetera, as our on-campus programs. Our online students do not cut any corners. They just take their courses from a different location."

Technology Improvements

So what has given these universities the belief that they can deliver an online product that is as effective as their on-campus instructional programs? For starters, the technology has—at last—caught up with the vision.

"In these online programs, you might not meet with other students or go for coffee with the professors afterward—which, let's face it, doesn't happen that often anyway—but you have a richer experience in some ways," notes Susan Metros, associate vice provost and associate CIO for technology-enhanced learning at the **University of Southern California**. "These are sophisticated platforms."

Metros cites the prevalence today of broadband networks, videoconferencing systems, webcasts, and live-chat applications, all of which are designed to increase interaction and collegiality—an aspect on which USC places a great deal of emphasis. "A lot of our courses are designed for cohorts, so you might go through the entire program with the same group of people," she explains. "I've heard from students and faculty who say that this creates a closer bond among students than they experience in the classroom."

"We get that kind of feedback fairly often," adds Michael Eddy, assistant dean for administration and planning at **Purdue University**'s (IN) Extended Campus. "In fact, we're trying to create courses where that kind of interaction is built in, where students have lots of opportunities to interact with each other online, and to get more virtual face time with their professors."

Face time does not mean spending hours watching a lecturer on screen, however. Such sleep-inducing approaches are what gave online learning a bad name in the first place, and they are rapidly being phased out. "We're trying to get away from the talking-head approach, where you film a lecture and make it available online," explains Eddy. "We're trying to get much more interactive. That's the new model of online education."

As in the classroom, however, the online technology is only as good as the instructor and the course design. "It's definitely a better experience for the students and the professors, thanks to the tech," says James Eddy, professor of public health education at the **University of North Carolina at Greensboro**. "But the real advance is the ability of teachers to use the technology effectively. Distance learning is getting better because people are weaving in the instructional-design piece."

With their ability to offer prospective students a name-brand degree online, traditional universities may have a competitive advantage over online-only and for-profit schools.

Eddy (no relation to Purdue's Michael Eddy) directs the school's Office of Academic Outreach and has been involved with distance learning since 1976. "Back then, distance learning was about driving 35 miles to Altoona," he jokes.

In "The Context of Distance Learning Programs in Higher Education: Five Enabling Assumptions," a paper penned in 2010 with Don and Elizabeth Chaney, Eddy wrote: "The technology exists to communicate with students in myriad ways. The challenge for the distance-learning program planner is not to infuse the course of study with all the latest and most sophisticated technology, but rather to select the technology that best meets the unique needs and interests of the learners and the instructors...."

Course Design Is Key

In the past, too many faculty assumed that whatever worked in the classroom would work online, usually with poor results. However, schools are now realizing that effective online courses require specialized approaches and knowledge, whether it comes from the institution's instructional design group

THE RIGHT TECHNOLOGY TO SET YOU APART

VERIZON HAS THE EXPERIENCE, NETWORK AND STRATEGIC ALLIANCES TO HELP YOU MAKE A DIFFERENCE FOR YOUR SCHOOL.

VERIZON SOLUTIONS FOR EDUCATION

- CAMPUS SAFETY
- COLLABORATIVE & VIRTUAL LEARNING
- MOBILE DEVICES & APPLICATIONS
- DIGITAL SIGNAGE
- AUTOMATED VENDING

Verizon enables innovative applications and cloud-based solutions, including Collaborative and Virtual Learning, to enhance mobile access to education resources while facilitating learning and interaction. Verizon technology helps extend the campus and expand learning opportunities. With a full suite of education solutions and the security and reliability of America's largest 4G LTE network, Verizon helps your institution operate more efficiently than ever before.

Start making a difference for your school.
Visit: verizonwireless.com/education

4G LTE is available in more than 200 markets in the U.S. Network details & coverage maps at **vzw.com**. © 2012 Verizon Wireless.

verizon

or an outside vendor.

In 2010, for example, USC partnered with two online integrators, 2tor and EmbanetCompass, to produce a new master's curriculum. The school launched six programs based on that collaboration in 2010, and plans to launch another five by 2013.

One of its first degree programs was the Master of Arts in Teaching. From an initial class of 80 students, it has grown to more than 1,200 students today. "There are more students in the online version than in the entire School of Education," notes Metros. In total, some 3,000 students are currently enrolled in USC's online professional master's programs, and all graduates receive degree certificates that are no different from those awarded to students studying on campus.

Indeed, as an indicator of USC's confidence in the quality of its online content, some learning modules are poised to migrate to its on-campus programs. "We negotiated with the third-party vendors so that the materials they developed for our online programs—the learning modules—could be used in residential courses," says Metros.

Like USC, Purdue is determined that its online programs should be worthy of the school name. To that end, the school decided to focus on postgraduate studies because it's extremely difficult to build an effective online undergraduate program. A typical undergraduate program consists of about 120 hours of courses, including electives, while a typical master's degree consists of 30 hours of "very lock-step" courses, in which everyone proceeds in a cohort, taking the same courses at the same time. Simply put, online graduate programs are much easier to develop and administer.

But online programs may also be better suited to older, more mature students. "It's a very different type of student," says Mary Sadowski, dean of Purdue's Extended Campus. "There's a level of maturity and discipline that's required to take classes where you don't have to appear in front of a professor at a specific time on specific days every week."

Maturity aside, there's an equally compelling business reason for pursuing the postgraduate market: a big pool of potential students who can't attend classes on campus for whatever reason—work, family, or location. With their ability to offer these prospective students a name-brand degree online, traditional universities may have a competitive advantage over online-only and for-profit schools. And they can potentially generate large amounts of revenue with minimal operational costs.

That's certainly how Purdue views the opportunity. According to Michael Eddy, Purdue intends to "increase its participation at the graduate level" by recruiting adults who are working full time and need a master's degree to advance their careers. "We're bringing in new students—students with a different profile—who would probably never come to campus, who will be pursuing their degrees as they work. We think we can grow that business in a significant way."

Purdue now offers several executive master's programs completely online. Additionally, the school runs distance graduate-degree programs for the employees of the Rolls-Royce facility in Indianapolis and Cummins Engine, also in Indiana.

But can these schools use their online programs to secure a new segment of students without also stealing students who might otherwise have

RESOURCES

For links to the schools, vendors, and organizations mentioned in this article, please visit ***campustechnology.com/0612_distance***.

COMPETING FOR A SLICE OF THE PIE

FORGET THE OLD IMAGE of distance learning as the domain of isolated, bored students. Competition is heating up in this space, and the learning experience is becoming richer and more interactive.

Indeed, recent surveys indicate that students like the online classes currently being delivered by traditional colleges and universities. For the 2011 National Online Learners Priorities Report, consulting firm Noel-Levitz asked 99,040 students from 108 institutions about their online experiences from the fall of 2008 through the spring of 2011. A quarter of those students reported that their experience met expectations, while 63 percent felt that it exceeded them. Overall, 73 percent of online learners surveyed were satisfied or very satisfied with their experience, and 76 percent indicated that they would probably or definitely reenroll in the program if they had to do it over again.

Given such high levels of satisfaction, it's no surprise that online enrollments are up. When the nonprofit Sloan Consortium conducted its first survey back in 2002, researchers found that 1.6 million college students were taking at least one online course. By 2009, that number had grown to 5.6 million. In "Going the Distance: Online Education in the United States, 2011," the Babson Survey Research Group, which took over the Sloan Consortium survey, found that online enrollment increased by nearly a million students between 2008 and 2009 alone.

It must be noted, however, that many of these gains have been achieved at online-only and for-profit schools. Indeed, so meteoric has been the rise of these schools that it has prompted speculation that traditional brick-and-mortar colleges are ultimately doomed.

Not so fast, says Michael Eddy, assistant dean for administration and planning at **Purdue University**'s (IN) Extended Campus. "There's been so much talk about whether the traditional universities are going to be able to survive the onslaught from the Phoenixes and the Capellas and all these online institutions," he notes. "Purdue has 150 years or so of experience developing brand recognition. As the traditional institutions gear up to do this online thing, we're going to be very competitive. We can compete on a cost basis, but also with brand-name firepower and the expertise of our faculty. That seems to us like a winning combination in the long term."

attended in person? "That was, in fact, one of the concerns of our faculty," recalls Metros. "Would we be cannibalizing our own residential programs? But it has been almost the opposite. If anything, the residential programs have grown, because now they're more visible."

Purdue is not taking any chances, though. Its online programs accept only students who can demonstrate that they can't attend classes on campus. "We're not cannibalizing the base here at all," claims Eddy, "but bringing in a different kind of student and actually expanding the pool of potential students."

He cites the example of Purdue students serving in the National Guard whose academic careers were interrupted when they were called up to serve in the Iraq war. "They patrolled the streets of Baghdad by day and took their Purdue courses online at night," he recalls. "It allowed them to continue to progress toward their degrees, and maybe not feel so disconnected from their lives back here in the States."

Undergraduate Potential

When it comes to undergraduate online degrees, schools probably face a greater danger of cannibalizing their residential programs. But many university administrators also believe that online-only programs are not the correct *educational* approach for dealing with young adults.

"USC staunchly believes that the undergraduates' curriculum should be a residential curriculum," notes Metros. "We want you to come *here*. We have so many international students, the cultural diversity is phenomenal—more so than at any other school in the US. Plus, when you're an undergrad you have a lot of learning to do outside the classroom: doing your laundry, learning to study, making all the good and bad decisions you need to make between ages 18 and 24. Our administration believes that undergraduates should have that experience."

That's not to say that online learning won't play a significant role in undergraduate studies. Indeed, the concept of blended learning—a mix of in-person and online learning—is gaining traction fast among both undergraduate and graduate programs.

Both the USC and Purdue distance-learning programs offer opportunities for face-to-face interactions. A USC student in the online Master of Arts in Teaching program, for example, must meet with his teacher adviser in the same school where he will complete his student teaching—one of 2,700 K-12 schools around the world. In fact, administrators at each university expect online-only programs to evolve over time into something closer to blended programs.

"We're a real bricks-and-mortar kind of campus," says Purdue's Sadowski, "and we think students get a lot out of working together and getting to know each other in the real world. We think the combination of online courses and face-to-face interactions—whether students are coming to our campus or meeting somewhere else—is what really works best."

UF's Chaney agrees. "Traditional education is definitely undergoing a shift to the blended model," he notes. "The shift enables us to reach our students outside the traditional classroom. Students are becoming more and more reliant on technology, and we can't continue to have them 'power down' when they walk into a classroom. Our educational system must evolve into more online and mobile environments."

And in this era of budget constraints, the move toward blended learning on campuses may make more than just pedagogical sense. It also comes down to dollars and cents—for schools and students alike.

"Whenever you have an economic downturn, budgets at colleges and universities are cut, and they have fewer professors teaching fewer courses," explains Chaney. "What they often give up is the second, third, and fourth sections of a course. It's those sections that provide the flexibility students need to build a schedule."

Without that flexibility, students who have to work a job or have scheduling conflicts are more likely to drop out or take longer to graduate. "But if that course is offered asynchronously through a distance-learning program," continues Chaney, "it shortens the time to the degree and allows students to carry a full load."

Given that universities typically charge the same tuition for online courses as for on-campus equivalents, it's fair to ask whether online degrees—even from traditional universities—will carry the same status in the wider world.

"We think the combination of online courses and face-to-face interactions is what really works best." *—Mary Sadowski, Purdue University*

"In 13 years of being involved in distance-education programs, I have never had a student come back to me and state that he didn't get a job because of taking online courses," says Chaney. "I look at it as a strong suit that these students are learning how to use multiple technologies in addition to the programmatic content. There will always be a segment of the population that cannot go back to a college campus, and online programs are the only way those students are going to be able to further their education."

As far as Metros is concerned, there is no distinction in quality between online and on-campus learning. "At the end of the day, it's a USC degree, and it doesn't say on your diploma that it's an *online* degree," she says. "You're alumni of USC. You're a member of the Trojan family." CT

__John K. Waters__ is a freelance writer based in Palo Alto, CA.


ARIZONA STATE
1

Dialing for DONORS

Increasingly sophisticated data mining is helping schools identify high-wealth alumni and predict when—and how much—they might give. **By Dian Schaffhauser**

WHEN TIMES GET TOUGH, grown children often turn to their parents for help—for some extra cash, even somewhere to stay. For colleges and universities, that role is filled by alumni donors. In 2011, with education budgets slashed across the country, giving accounted for 6.5 percent of college expenditures, according to the Council for Aid to Education. This money pays for everything from new buildings to scholarships and guest lecturers, and impacts almost every corner of campus. It's ironic, then, that the folks in the advancement group—responsible for fundraising, alumni relations, prospect research, and advancement services—often find themselves on the outside looking in when it comes to the data needed to do their jobs. ▸

"It's almost where you didn't want to talk about it, as if we wanted to keep [fundraising] separate from the academics and all the other great things our institution does," recalls Sally Boucher of her time as director of development at **James Madison University** (VA). In her current role as director of research for WealthEngine, a prospect-research company, she's seen advancement offices wait long periods—years in some cases—to gain access to something as simple as lists of new students.

"Not having that data in a timely way to plan and execute is a detriment," she says. "You could have had two years where you were getting gifts from the parents while the student was there, and working with the freshman and sophomore classes to start educating them about the importance of the university community—to help build that culture of philanthropy."

Just as universities are discovering the power of data to increase efficiencies in every facet of their operations, schools' fundraising departments must also have access to timely data to do their jobs: identifying prospective donors, predicting how much money they might give, customizing the message, and calculating the best time to make a pitch.

And the value of the data goes far beyond simple numbers such as net worth. Even seemingly irrelevant data have value, because—taken together—they can help schools determine how engaged an alumnus is with his alma mater, and help fundraisers strike an appropriate chord. "The number of data points we collect on an individual is more indicative of his likelihood to give than necessarily the intrinsic value of the data point itself," notes Brian Bradley, enterprise applications manager for the **Arizona State University** Foundation.

When it comes to dialing for donors, a data strategy can be divided into three components: collection, analysis, and implementation. While no silver bullet exists to address all three together, colleges and universities are achieving impressive results from alumni data mining by pursuing a number of solutions.

Data Collection

"Never...was so much owed by so many to so few" were Winston Churchill's famous words during the Battle of Britain. He could just as easily have been talking about alumni giving: For the most part, universities owe a big debt of gratitude to a relatively small number of donors. Indeed, according to the Council for Advancement and Support of Education, 63 percent of all donations come from just 1 percent of donors at institutions that raise $80 million or less each year. And that number just gets higher as the dollar amounts increase. The holy grail for fundraisers is to identify that 1 percent and then find ways to connect with them.

Believe it or not, many high-wealth alumni do not flaunt their riches like Donald Trump. Tracking them down requires hard work and some sleuthing. At **Villanova University** (PA), for example, Chris Connors, director of prospect research, and his team used to keep up with alumni through news alerts fed by information provider NewsBank as well as Google Alerts. More recently, however, Villanova has hitched its wagon to Equilar Atlas, a data-based wealth-networking service. When Connors first tested the service, he immediately discovered several alumni in prominent positions of whom he had been unaware.

Introduced in fall 2011, Atlas is like a "LinkedIn of the rich and famous," says a laughing David Chun, CEO of Equilar. The data behind Atlas has been accumulated for 12 years through the company's flagship service, Insight, which provides executive-compensation benchmarking. Unlike LinkedIn, however, Atlas focuses exclusively on people within public companies.

Atlas provides schools with a number of lead-generation services. First, it creates a list of prospects who have an affiliation to the institution. Universities can also use information from Atlas to fill in details in their own alumni databases.

Second, Atlas provides publicly available financial information on those same individuals, such as when their stock options will vest. For fundraisers, this kind of information is golden. If an advancement officer can get in front of alumni just before they reap a major windfall—and take an equally big tax hit—some of that wealth might flow to the school instead of the IRS.

Third, it helps schools publicize the successes of their graduates and keep their communities informed about others with whom they might cross paths in the corporate world. At Villanova, for example, information from Atlas provides fodder for alumni publications and the university website, as well as an

MOBILE GIVING

THESE DAYS, social media is a given in institutions, says Sally Boucher, director of research for WealthEngine, a prospect-research company. While this doesn't mean people have totally figured out how to use it for fundraising, "in terms of relationship management, they're doing a nice job in creating a community."

"Mobile giving," however, is an area ripe for better understanding. "More and more people are getting more and more of their information via their smartphones," Boucher points out. "A lot of young people are ditching the whole idea of using a laptop computer and are getting to the internet via their smartphone." If schools want to be where their alumni are, they need to have a website and e-mail messages that are mobile-optimized.

Schools also need to figure out how to draw mobile users into the giving community. "It's scary ground to be on," notes Boucher. "Even if you have someone's mobile number, you don't really have permission to start texting them. You can send them an e-mail, but you can't really start engaging with them via their mobile number until they give you permission. That's what colleges and universities need to explore over the next few years, so that when everybody has their technology with them—and you can reach them anywhere, anytime—you know what you're doing."

opportunity to send out congratulatory letters to graduates when good things happen in their careers.

"It is a fire hose of information," says Chun. "There are literally thousands of filings every minute that are submitted to the FTC. Trying to find the information you want is virtually impossible—or you need a tremendous amount of resources to do it. What we've done is taken that fire hose and turned it into a drinking fountain that people can actually use."

On a daily basis, Connors' Villanova team goes through an alert from Atlas to update its donor and prospect database, and to pass along information that might be of value to development staff. These alerts consist of a variety of bulleted news items highlighting events such as alumni stock sales, stock awards/vesting events, as well as newly identified alumni.

For Connors, whose job also encompasses soliciting business and foundation support, Atlas has helped him develop a better sense of the corporate lay of the land. Portraits of company executives, for example, tell Connors "what their backgrounds are and what kinds of connections they have in the Philadelphia region." Frequently, the service identifies companies at which two or more corporate officers have connections to Villanova, which can help the university in its efforts to enlist corporate supporters.

Connors feels that Atlas has made his outfit more efficient. "It's taken a lot of information that we would have had to gather in different places and brought it under one roof," he notes. "Atlas has reduced the amount of time we spend on finding this information."

STUDENTS AT ASU'S Annual Giving operation make calls to donors who have been segmented by giving history, role, college association, and other data.

Data Analysis

Predictive analytics—using existing data to predict the probability of future behavior or outcomes—is nothing new to institutional fundraising. According to a survey by WealthEngine, 38 percent of schools use some form of it. But why aren't more schools taking advantage of it? They have the data, after all. Colleges and universities have been collecting information on their alumni for decades: giving histories, demographics, ties to the school, and financial records. Plus, explains WealthEngine's Boucher, many schools have access to homegrown resources—particularly faculty members who teach statistics—that can help put a predictive-analytics program in place.

For schools that don't have the wherewithal to develop an in-house program, it's possible to utilize a vendor solution such as Blackbaud's Target Analytics or the Reeher Platform, or to engage the services of specialized consulting firms such as Grenzebach Glier and Associates and Marts & Lundy.

The **University of Cincinnati** (OH) has been using the Reeher Platform for five years as part of a $1 billion fundraising campaign. "The biggest difference is that we're working faster now," said William Mulvihill, executive vice president of the UC Foundation, in a 2011 interview. "We had about 250,000 [alumni to approach], and the Reeher Platform allowed us to focus our resources on 10,000 key prospects."

Each night, Reeher brings in all of the historic transaction and constituent information (address, degree type, activities, etc.), no matter what the data source—Ellucian (formerly SunGard Higher Education) Advance, Blackbaud's Raiser's Edge, or something else. The software then uses statistical techniques to come up with an estimate for the dollar value of a gift that a particular alumnus might make. As part of the algorithm, the platform takes into account whether alumni are regular, first-time, or non-donors. It also takes into consideration annual fund and major gift donations.

"Once the factors are identified, we put [alumni] in rank order, based on the expected value of their gift," says company president Andy Reeher. "The factors are unique to each customer, and the scores change over time as people behave differently."

Implementation

Predicting donor behavior is just the beginning, however. Schools still have to initiate contact, make a compelling pitch, and close the deal. For the system to work, managers and staff have to believe in the process, follow through, and keep working the list. "It's really a story about management discipline," notes Reeher. "It's not a story about magic data or reports that are splitting the atom. It's about a combination of tools that are very easy to use and a management group that is consistent in their application."

To promote this discipline, the Reeher service also includes coaching and training for senior users through on-site visits, webinars, and conferences. In addition, it shares success stories from within its client network, helping customers implement approaches that have worked elsewhere.

It's an approach that has certainly benefited Cincinnati. Since the system was implemented five years ago, the number of development officers who raise more than $1 million a year has grown by 65 percent. And the level of fundraising has skyrocketed, too, from an average of $65 million a year to more than $100 million. Tellingly, the number of alumni who have made a gift of more than $1 million has jumped from 72 to 450.

Obviously, schools devote a lot of resources to courting the top 1 percent of donors. But they can't afford to overlook the other 99 percent, whose collective contributions can total tens of millions of dollars. While many alumni can afford to give only a few hundred dollars, they too want to feel as if they are valued and that their money is going to support aspects of the university that they like. To achieve that goal, Arizona State University's Annual Giving operation is using data mining to create customized pitches on a mass-market scale.

While the views from the windows of ASU's call center are stunning, the center itself is fairly typical of such facilities nationwide. Since 1996, ASU students have worked the phones seven days a week during evening hours, when prospects are mostly likely to take a call. To manage the process, the university uses Ellucian Advance, a donor-database product, and SmartCall, which allows alumni data from Advance to be segmented into calling groups.

What's different is just how precisely ASU segments the donor population. "Really it's about the way we use the software, and the levels we've taken it to," explains Bradley. "We do far more segmentation than we used to in order to personalize the messages to the donors."

According to Shad Hanselman, director of annual giving, the university tracks a host of criteria, including giving history, the number of years donors have given consistently, the amount they've given, and the amount of their latest gift. It also segments the list by role—alumnus, parent, or friend. Donors are further categorized by their specific college, so that callers from that same college can make contact.

Based on these segments, the script used by callers is fine-tuned. For example, Hanselman explains, "We know that alumni from the College of Education are very different from the College of Business on how they like to be approached and what they like to hear about." Likewise, the organization uses different messaging for each generation and a different way "of relating back to the university."

In many ways, ASU's approach is reflective of a cultural change: Not only are development officers more attuned to the possibilities of slicing and dicing data, but donors themselves are more receptive—some would say expectant—of a customized approach that draws on a wide variety of touch points with the institution.

"No longer can you send out one message and have it apply to everybody," asserts Hanselman. "[Our approach] is taking a lot of the ideals of major gifting programs, really getting to know the person and speak with them on their level, and then applying that to mass-market communication."

And if a single message is no longer enough, neither is reliance on a single medium. At ASU, the evening phone call is just the beginning of a conversation that spans everything from snail mail to e-mail, Facebook, and Twitter. Because there are now so many ways to reach donors, the university is careful to ensure that all contacts—regardless of the medium—are carefully choreographed. An overarching theme in ASU's fundraising plan is to avoid "being intrusive."

"We've realigned our strategies," notes Bradley. "We're making more effort to organize our contacts overall, so we don't burn people out now that we have all these additional communication channels." CT

Dian Schaffhauser is a senior contributing editor of this magazine.

Predictive analytics helped the University of Cincinnati boost its fundraising from $65 million a year to more than $100 million.

RESOURCES

For links to the vendors and organizations mentioned in this article, please visit *campustechnology.com/0612_donor.*

Fujitsu recommends Windows® 7.

Accept no boundaries

intel inside
CORE i7 vPro
Protect. Manage.

FUJITSU LIFEBOOK
Tested for the hardest demands of business life

It's all about survival of the fittest. And that also applies to your Tablet PC. With the 2nd Gen Intel® Core™ vPro™ processor family, the FUJITSU LIFEBOOK® T901 Tablet PC delivers best performance in a lightweight, "semi-rugged" MIL-STD-810G tested convertible tablet form factor. The bright 13.3-inch LED backlight display is a pleasure to use, with maximum networking connectivity and an optional modular bay battery allowing for all-day computing. The LIFEBOOK's rock-solid security suite make it a perfect fit for today's demanding business and commercial environments. So nothing can stop you now.

LIFEBOOK
with the 2nd Gen Intel® Core™ vPro™ processor family – Enriches your life.

www.shopfujitsu.com

shaping tomorrow with you

FUJITSU

2012 CAMPUS TECHNOLOGY

19th Annual Education Technology Conference

Co-located with AAEEBL and the
Education Security Conference & Pavilion

July 16 – 19, 2012 | Seaport World Trade Center | Boston, MA

Still time to save!
$100 off when you register by 6/22/12!

SOCIAL, MOBILE, DIGITAL AND VIRTUAL

Explore the intelligent use of technology in higher education.

Join the pioneers and experts driving excellence on campus at the national conference on the technologies, systems and products that are redefining the higher education landscape.

OPENING KEYNOTE

Deeper Learning Conversations on Technology, Education and the Road Ahead

Mark Milliron
Chancellor, WGU Texas

Former Deputy Director for Postsecondary Improvement, The Bill & Melinda Gates Foundation

WEDNESDAY 'INNOVATORS' KEYNOTE

Presented by Dr. Eduardo M. Ochoa
Assistant Secretary for Postsecondary EducationU.S. Department of Education

CLOSING KEYNOTE

Presented by Joel M. Smith
Vice Provost and Chief Information OfficerCarnegie Mellon University

REGISTER TODAY!

CAMPUS TECHNOLOGY 2012: A CONFERENCE UNIQUE IN HIGHER EDUCATION

If you want to leverage technology to drive performance in education, join us in Boston! We have expert speakers from leading institutions, deep dive sessions on all the latest topics and a host of tecresources lined up for you. Acquire the skills you need to master and implement today's most compelling and revolutionary technologies—cloud computing, mobile integration, collaborative environments, Web 2.0, social media, personalized learning and more.

TOP REASONS TO ATTEND

New approaches to your academic technology future.

Pioneering experts and thought-leaders in technology for higher education will explore the latest wave of technologies that will change your approach and give you new tools to tackle your campus' most pressing challenges and needs.

Real information for the real world.

Acquire the most up-to-date information on new tools, applications and services—and how they are working on real campuses throughout the country. Workshops and sessions help you master these same technologies for seamless integration in your plans and initiatives.

Nonstop networking opportunities.

Campus Technology 2012 is a community comprised of highly motivated technology professionals from across the country and around the world. Network in a supportive environment that enlists technology leaders as peer advisors and role models.

Collegial environment.

Enjoy easy access to speakers and vendor representatives in a relaxed environment where the common goal is professional growth and shared solutions to specific technology challenges.

SCAN HERE TO VIEW THE CONFERENCE PROGRAM ONLINE!

REGISTRATION PACKAGES

Conference Registration

Only $699* through June 22
*Early Bird Savings. $799 after 6/22/12

- All conference sessions
- Keynote and general sessions
- Access to Exhibit Hall
- Exhibit Hall Reception
- Poster Sessions
- Lunch Tuesday and Wednesday
- Refreshment breaks

Pre-Conference Workshops and Conference Registration

Only $899* through June 22
*Early Bird Savings. $999 after 6/22/12

- Morning and Afternoon Workshops
- All conference sessions
- Keynote and general sessions
- Access to Exhibit Hall
- Exhibit Hall Reception
- Poster Sessions
- Lunch on Monday, Tuesday and Wednesday
- Refreshment breaks

Complete Conference and Hotel Package

Only $1,999* through June 22
*Early Bird Savings. $2,099 after 6/22/12

- 4 nights hotel (Sunday – Wednesday) at the Seaport host hotel (room and tax only)
- Morning and Afternoon Workshops
- All conference sessions
- Keynote and general sessions
- Access to Exhibit Hall
- Exhibit Hall Reception
- Poster Sessions
- Lunch on Monday, Tuesday and Wednesday
- Refreshment breaks

Special Team Registration Pricing (Groups of 3 or More)

Only $599* through June 22
*Groups of 3+ Early Bird Conference only. $699 after 6/22/12

Bring a group of your colleagues to Campus Technology and save $200! Group discounts are available for institutions that bring 3 or more people. Conference Package is $599 per person before 6/22/12 and $699 after 6/22/12. Early Bird Conference + Workshop Package is $699 and $799, respectively.

For more information on group registration e-mail CampusTech@ce.uoregon.edu.

campustechnology.com/summer12

We've got your back...

and your front

jenzabar.com/GotYourBack

JENZABAR®
best and brightest

Index

>> Sales Contact Information

Wendy LaDuke
President and Group Publisher
P 949-265-1596
C 714-743-4011
wladuke@1105media.com

Mark D. Buchholz
West Coast Sales Director
P 949-265-1540
C 714-504-4015
mbuchholz@1105media.com

M.F. Harmon
Eastern Region Sales Manager
P 207-883-2477
C 207-650-6981
mfharmon@1105media.com

Tom Creevy
Central Region Sales Manager
P 847-358-7272
C 847-971-5621
tcreevy@1105media.com

Jean Dellarobba
Sales Account Executive
P 949-265-1568
C 949-357-7564
jdellarobba@1105media.com

Patrick Gallagher
Event Sales Director
C 617-512-6656
pgallagher@1105media.com

Stephanie Chiavaras
National Accounts Manager, Events
P 508-532-1424
C 617-784-3577
schiavaras@1105media.com

Deborah Carroll
Event Sales Representative
C 203-814-7408
dcarroll@1105media.com

Corporate Headquarters:
1105 Media
9201 Oakdale Avenue, Ste. 101
Chatsworth, CA 91311
1105media.com

Media Kits: Direct your media kit requests to Michele Werner, 949-265-1558 (phone), 949-265-1528 (fax), mwerner@1105media.com.

Reprints: For single-article reprints (in minimum quantities of 250-500), e-prints, plaques and posters contact PARS International, 212-221-9595 (phone), 1105reprints@parsintl.com, *magreprints.com/QuickQuote.asp*.

List Rentals: This publication's subscriber list, as well as other lists from 1105 Media, Inc., is available for rental. For more information, please contact our list manager, Merit Direct: 914-368-1000 (phone); 1105media@meritdirect.com; *meritdirect.com/1105*.

COLLEGE/UNIVERSITY INDEX

COMPANY INDEX

ADVERTISER INDEX

Note: Advertisers with * are regional ads and may not appear in this issue.

Campus Technology (ISSN 1553-7544) is published monthly by 1105 Media, Inc., 9201 Oakdale Avenue, Ste. 101, Chatsworth, CA 91311. Periodicals postage paid at Chatsworth, CA 91311-9998, and at additional mailing offices. Complimentary subscriptions are sent to qualifying subscribers. Annual subscription rates payable in US funds for non-qualified subscribers are: US $29.00, International $44.00. Annual digital subscription rates payable in US funds for non-qualified subscribers are: US $39.00, International $39.00. **Subscription inquiries, back issue requests, and address changes:** Mail to: *Campus Technology*, P.O. Box 2166, Skokie, IL 60076-7866, e-mail CAMmag@1105service.com or call 866-293-3194 for US & Canada; 847-763-9560 for International, fax 847-763-9564. **POSTMASTER:** Send address changes to *Campus Technology*, P.O. Box 2166, Skokie, IL 60076-7866. Canada Publications Mail Agreement No: 40612608. Return Undeliverable Canadian Addresses to XPO Returns: P.O. Box 201, Richmond Hill, ON L4B 4R5, Canada.

C-Level View

Having Deeper Learning Conversations

Today's technologies can support change that puts learning first. **By Mary Grush**

Higher education is consumed with talk about graduation and retention rates, the impact of deep budget cuts, and the prospects of technology to change the game. While these are all valid issues, Mark Milliron, chancellor of **Western Governors University Texas**, believes deeper learning conversations—those that embrace learning as the core value—need to come first. Here's what he told *CT*.

CT: Is it time to reexamine our concept of the learner?

MARK MILLIRON: Yes, I think that's one of the deeper learning conversations we need to have in higher education. While we still tend to speak in terms of traditional learners, it's non-traditional learners—especially working adults—who have become the modal learners. They are ubiquitous, and of course technology is enabling that. We need to look at the diversity of learners today and consider what kinds of institutions, learning models, and supportive technologies will serve them best.


MILLIRON

CT: Will there be changes in the credentialing of students, and how would you preserve the notion of a liberal education?

MILLIRON: This brings us back to a key question: *Are we ready to take learning seriously?* First, we need to ask who the learners are, and what kind of an education journey they need to go on. Then, we must think about the kinds of credentials that will give them the best value both in the marketplace and in their learning lives.

It's likely that we will need to provide a staged approach for many who aspire to a bachelor's degree, possibly including new types of sub-baccalaureate credentials and certifications. But that doesn't mean we no longer care about a liberal education. We absolutely, fundamentally care about it. So I think there's a "both-and" conversation about these changes: It's not about atomizing credentials and creating mere vocationalization, just because those are easy to do with technology. It's about how we blend the best of core technical competencies with those liberal education competencies that we've cared about for a long time.

Lifelong learning has become one of the coins of the realm in education. We are not preparing students for jobs; we are preparing them for a lifetime of learning and career pathways.

CT: What technologies enable this kind of change?

MILLIRON: Many technologies touch the core of education. Because we have more powerful learning analytics and better data infrastructure now, along with pattern-recognition software and related predictive resources, we are able to guide students in ways we simply couldn't manage before administratively. And we're seeing several other technologies—from learning maps to e-portfolios to recommendation engines to degree-pathway audits—that enable us to connect the dots better between sub-baccalaureate credentials, bachelor's degrees, and advanced degrees. And these same technologies help us map competencies from the job market to discrete learning experiences for the continuing student.

Think about it: We can now map students' entire learning journeys from the individual digital curricular learning resources to mentors and assessments at the course level, to certifications, credentials, and entire degree programs as they complete.

It's not going to be an easy change at first—in fact, it's going to be a bit of a maelstrom for a while. But because we have these types of technologies at our fingertips now, we can start asking more interesting questions about what works and what doesn't.

CT: And make sure those questions and conversations still put learning first?

MILLIRON: Exactly. **CT**

Editor's note: Mark Milliron will give the opening keynote, "Deeper Learning Conversations on Technology, Education, and the Road Ahead," at Campus Technology 2012, July 19-22 in Boston. For information, visit campustechnology.com/summer12.

Panasonic
ideas for life

Visit us at
InfoComm 2012
Booth #C6308

When your campus relies on cutting-edge technology, you can rely on us. Helping higher education go even higher is how we're engineering a better world.

panasonic.com/infocomm

SOLUTIONS FOR HIGHER EDUCATION

On Time, On Contract, On Budget

Take the Headaches Out of Your Next Tech Refresh

GovConnection can make your next tech refresh uneventful. From planning to deployment and beyond, we'll work with you from start to finish to ensure that your new equipment arrives customized for your unique environment and is ready to be used—right out of the box.

Start Out on the Right Foot with GovConnection.

Discuss your plans directly with our IT experts, and together we'll find the right solution for your present and future needs.

Call your Account Manager today for more information about our Technology Deployment Solutions!

Kingston TECHNOLOGY · meraki · plantronics Simply Smarter Communications™ · Symantec. · xerox

1·800·800·0019

www.govconnection.com/techdeploy

Follow us on Twitter!

GovConnection® tools for higher learning™