

THE CAMPUS **COMPUTING PROJECT**

www.campuscomputing.net

October, 2007

The 2007 National Survey of Information Technology in U.S. Higher Education

IT Security and Crisis Management Pose Continuing Challenges

IT security and crisis management present continuing challenges for college and university officials according to new data from the 2007 Campus Computing Survey. The survey indicators for IT security and crisis management reveal progress

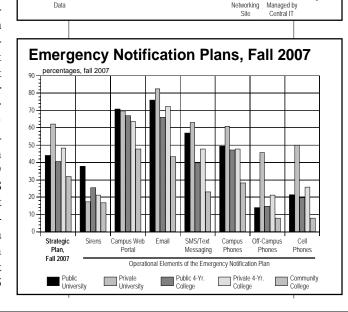
on some issues and little change on others over the past five years. For example, just three-fifths (59.1 percent) of the institutions participating in the 2007 survey report a strategic plan for IT disaster recovery, up slightly from 2006 (55.7 percent) and reflecting only modest gains from 2004 (55.4 percent) or even 2002 (53.0 percent).

The good news in the 2007 survey data is that the percentage of campuses reporting hacks or attacks on campus networks is declining, down to 45.6 percent in 2007 from 51.1 percent in 2005. Similarly, fewer campuses report major problems with computer viruses (14.8 percent, compared to 35.4 percent in 2005) and spyware (15.9) percent, compared to 40.8 percent two years ago). But the incidents of stolen computers with sensitive data increased slightly from 2006 to 2007 (17.1 percent in 2007, compared to 13.5

percent in 2006 and 15.3 percent in 2005). And although the numbers are generally low (under 15 percent), more campuses report student security incidents linked to social networking sites such as Facebook or MySpace (13.2 percent in 2007 vs.

IT Security Incidents, 2005-2007 2006 2007 Identity Intentional Virus Exposed Data Incident Management Infestation Linked on a Employee Server Not Transgression

Networking



Data

9.8 percent 2006.) Additionally, data losses linked to a server in a distributed computing environment (and not under the control of central IT services) also rose this past year to 14.6 percent, compared to 11.3 percent in 2006. A new item on the 2007 survey

> reveals that 6.5 percent of campuses experienced an IT security incident this past year due to an intentional employee transgression.

> Moreover, in the wake of the tragic events at Virginia Tech in spring 2007, many campuses are moving quickly to enhance and expand IT and communication resources and services as part of a broader IT and campus crisis management plan. As of fall 2007, more than two-fifths (44.0 percent) of campuses report a strategic plan for emergency notification or communication services. Yet for most institutions, the key elements of these emergency notification/communication plans appear to be exisiting IT resources such as email (66.4 percent), campus web sites/portals (62.6 percent), and campus phone services (44.6 percent). Although there are some variations by sector, comparatively few institutions have the capacity to provide notification services to off-campus phones (18.0 percent) or cell phones (22.1 percent).

"The 2007 survey data confirm the continuing security and crisis management challenges confronting campus IT officials across all sectors of higher education," says Kenneth C. Green, founding director of The Campus Computing Project and a visiting scholar at The Claremont Graduate

University in Claremont, CA. "Two years after Hurricanes Katrina and Rita and six years after the 9-11 attacks, it is still surprising to see that so many colleges and universities have yet to update or complete their IT disaster and crisis management plans. Additionally, and not surprisingly, recent events at Virgina Tech, Delaware State and other institutions have created new expectations and, in some instances, new mandates, for emergreency notification services."

Although security issues pose continuing challenges for campus IT officials, the proportion who identify IT security as the "single most important IT issue confronting my institution over the next two-three years" declined slightly in 2007 to 25.5 percent, compared to 30 percent in both 2005 and 2006. Ranked second in 2007 is "upgrading/replacing administrative IT/ERP systems (13.0 percent), followed closely by "hiring/retaining qualified IT staff (12.3 percent). The ERP upgrade/replacement issue moves from third in the 2005 and 2006 surveys to second this year, replacing "the instructional integration of information technology" (11.2 percent in 2007 vs. 17.3 percent in 2006 and 40.5 percent in 2000). The new concern about hiring in the 2007 survey suggests growing competition for qualified IT talent in both the campus and corporate sectors.

Wireless campus networks now reach three-fifths (60.1 percent) of college classrooms, compared to half (51.2 percent) in 2006 and just a third (31.1 percent) in 2004. Additionally,

more than three-fourths (76.7 percent) of the campuses participating in the 2007 survey report a strategic plan for wireless in fall 2007, up from 68.8 percent in 2006 and 55.3 percent in 2004. By sector, the proportion of classrooms with wireless ranges from over two-fifths (44.4 percent) in com-

Single Most Important IT Issue

percentages, 2000-2007								
2000	2001	2002	2003	2004	2005	2006	2007	
Instructional Integration of IT (40.5%)	Instructional Integration of IT (31.5%)	Instructional Integration of IT (24.1%)	Instructional Integration of IT (21.4%)	Network & Data Security (21.2%)	Network & Data Security (30.4%)	Network & Data Security (29.5%)	Network & Data Security (25.5%)	
IT User Support (22.3%)	IT User Support (15.4%)	Upgrade/ Replace ERP (18.8%)	Upgrade/ Replace ERP (17.6%)	Instructional Integration of IT (18.5%)	Instructional Integration of IT (18.1%)	Instructional Integration of IT (17.3%)	Upgrade/ Replace ERP (13.0%)	
Financing IT (14.6%)	Upgrade/ Replace ERP (12.6%)	Financing IT (15.1%)	Financing IT (16.1%)	Upgrade/ Replace ERP (17.2%)	Upgrade/ Replace ERP (15.9%)	Upgrade/ Replace ERP (16.1%)	Hiring/ Retaining IT Staff (12.3%)	

munity colleges (up from 26.8 percent in 2005) to more than two-thirds (69.8 percent) in private research universities (up from 52.8 percent in 2005 and 47.4 percent in 2004).

"Wireless can be a wonderful resource for everyone on campus," says Green. But he notes that there is continuing evidence of backlash against wireless from some faculty who would prefer that students not hide behind their computer screens during class. Green also comments that the

arrival of the Apple iPhone and a new generation of network-capable PDA and phone devices will present new challanges for campus IT officials and new demands for access to the campus network from the growing numbers of students, faculty, and staff who will come to campus with these devices. "To date, campus officials have preferred not to deal with mobile phones and PDAs on campus networks. That will change with the arrival of a new generation of network

compatible devices in the coming year."

The 2007 survey data point to little change in the orientation towards Open Source applications among sen-

THE CAMPUS COMPUTING PROJECT

Begun in 1990, The Campus Computing Project is the largest continuing study of the role of computing, information technology, and eLearning in American higher education. The project's national studies draw on qualitative and quantitative data to help inform faculty, campus officials, policy-makers, and others interested in a wide array of information technology planning and policy issues that affect colleges and universities in the United States.

The 2007 Campus Computing Survey was supported, in part, by the following sponsors: Adobe Systems, Apple, Aruba Networks, BearingPoint, Blackboard, Cengage Learning, Center for Digital Education, Cisco Systems, Datatel, Dell, EDUCAUSE, Follett Higher Education Group, Houghton Mifflin Company, IBM Higher Education, Jenzabar, Lenovo, Longsight Group, McGraw-Hill Higher Education, Mellon Foundation, Microsoft, NTI Group, Oracle, Parallels, Pearson Education, PerceptIS, Rave Networks, rSmart Group, SAS, SunGard Higher Education, Sun Microsystems, and TouchNet.

For additional information, please contact:

THE CAMPUS COMPUTING PROJECT

KENNETH C. GREEN

VISITING SCHOLAR, SCHOOL OF EDUCATIONAL STUDIES

THE CLAREMONT GRADUATE UNIVERSITY • CLAREMONT, CA 91711 • USA

$\hbox{\it Mailing Address}$

 ior campus IT officials, first reported in 2004. Almost three-fifths (57.3 percent, vs. 51.9 percent in 2004) of CIOs agree that "Open Source will

play an increasingly important role in our campus IT strategy." However, less than a third of the 2007 survey respondents (27.6 percent vs. 28.9 percent in 2004) agree that Open Source "offers a viable alternative" for key campus administrative or ERP applications such as student information systems, campus finance systems, or personnel/human resource software."

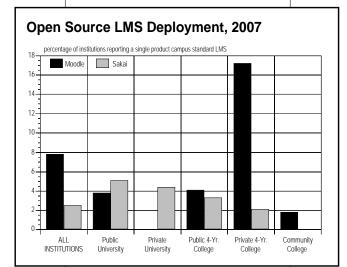
Yet even with the continuing "affirmative ambivalence" about Open

Source among many senior campus IT officials, the 2007 data document key gains in the deployment of Open Source Learning Management Systems (LMS). A small but growing number of colleges and universities have switched from a commercial

LMS to an Open Source LMS over the past three years, establishing an Open Source LMS as the single standard for the campus. The proportion of institutions that have standardized on Sakai as the campus LMS remains steady at about 3 percent. However, the proportion using Moodle as the campus standard LMS almost doubled this past year, rising from 4.2 percent in 2006 to 7.8 percent in 2007. Moodle is particularly popular in private four-year colleges: almost one-fifth (17.2

percent) of private four-year institutions have designated Moodle as the campus standard LMS, up from 10.2 percent in 2006.

"There is ample evidence of growing interest in and the slow but rising deployment of Open Source applications," says Green. "The recent gains for Moodle and Sakai suggest that ten years after the deployment of the first commercial LMS applications, cam-



pus officials and faculty committees are reviewing seriously the various LMS offerings from both commercial providers and the collaborative Open Source movement."

The 2007 survey brings new data to the discussion about campus ef-

Campus Policies and Procedures to Address P2P Downloading

Students Lose Net

Privileges

Private 4-Yr.

Community College

Explicit Campus

Policy on

P2P Downloading

forts to address the problem of peerto-peer downloading of music and movies on campus networks. As noted in past surveys, the vast majority of institutions (82.9 percent) have campus policies to address inappropriate P2P activity. The 2007 survey offers new information about the procedures that enforce these policies: 70.5 percent of institutions report that students can lose their network privileges for P2P violations,

45.9 percent impose other sanctions for P2P violations, almost half (45.9 percent) have installed software to monitor and stem inappropriate P2P activity, and an eighth (12.8 percent) have mandatory user education programs.

"The data confirm that colleges are making significant efforts and investments to address P2P piracy on campus networks," says Green. "Unfortunately, some critics will cite the survey data to argue that campuses are not doing

enough in this area. But the fact remains that colleges and universities are far more conscientious, indeed far more aggressive, about P2P issues than consumer market broadband providers. Moreover, many institutions are spending significant

sums to deploy software that providers claim will stem P2P downloading, even as we know that the proposed P2P software solutions are far from perfect, as was acknowledged in recent Congressional hearings."

The 2007 Campus Computing Survey is based on data provided by senior campus IT officials, typically the CIO, CTO, or other ranking campus IT officer, representing 555 two-and four-year public and private colleges and universities across the United States.

Survey respondents completed the questionnaire during September and October, 2007.

Copies of the 2007 Campus Computing Report will be available on December 10th. Order from Campus Computing, PO Box 261242; Encino, CA 91426-1242. Please use the order form on page 4.

ORDER FORM THE 2007 CAMPUS COMPUTING SURVEY REPORT

THE 2007 CAINIPUS CONIPUTING SURVEY REPORT							
Please send me The 2007 Campus Computing Report:							
available 10 December 2007 • ISSN 1521-1614							
Please contact Campus Computing for information about site licensing options. copies, Campus Computing 2006 @ US \$37.00 each copies, Campus Computing 2006 @ US \$35.00 each copies Campus Computing 2005 @ US \$30.00 each copies, Campus Computing 2004 @ US \$30.00 each copies, Campus Computing 2003 @ US \$20.00 each	(Prepaid orders only. Please contact <i>Campus Computing</i> or information about overseas shipments, PDF files, quantity discounts, and credit card payment.) Name						
copies, Campus Computing 2002 @ US \$20.00 each copies, Campus Computing 2001 @ US \$20.00 each.	Organization						
Shipping fees: US \$2.00 for book rate/4th class delivery to US and Canadian addresses. CA residents must include sales tax (8.25 pct). Please add US \$10.00 for air delivery to overseas addresses.	Address						
Enclosed is a: □ personal check □ institutional check □ institutional P/O for \$	City/State/ZIP						
To order the report on the Web: www.campuscomputing.net. We accept credit cardoxder form available online.	e-mail						
Make checks payable to: Kenneth Green/Campus Computing							

The Campus Computing Project PO Box 261242 Encino, CA 91426-1242