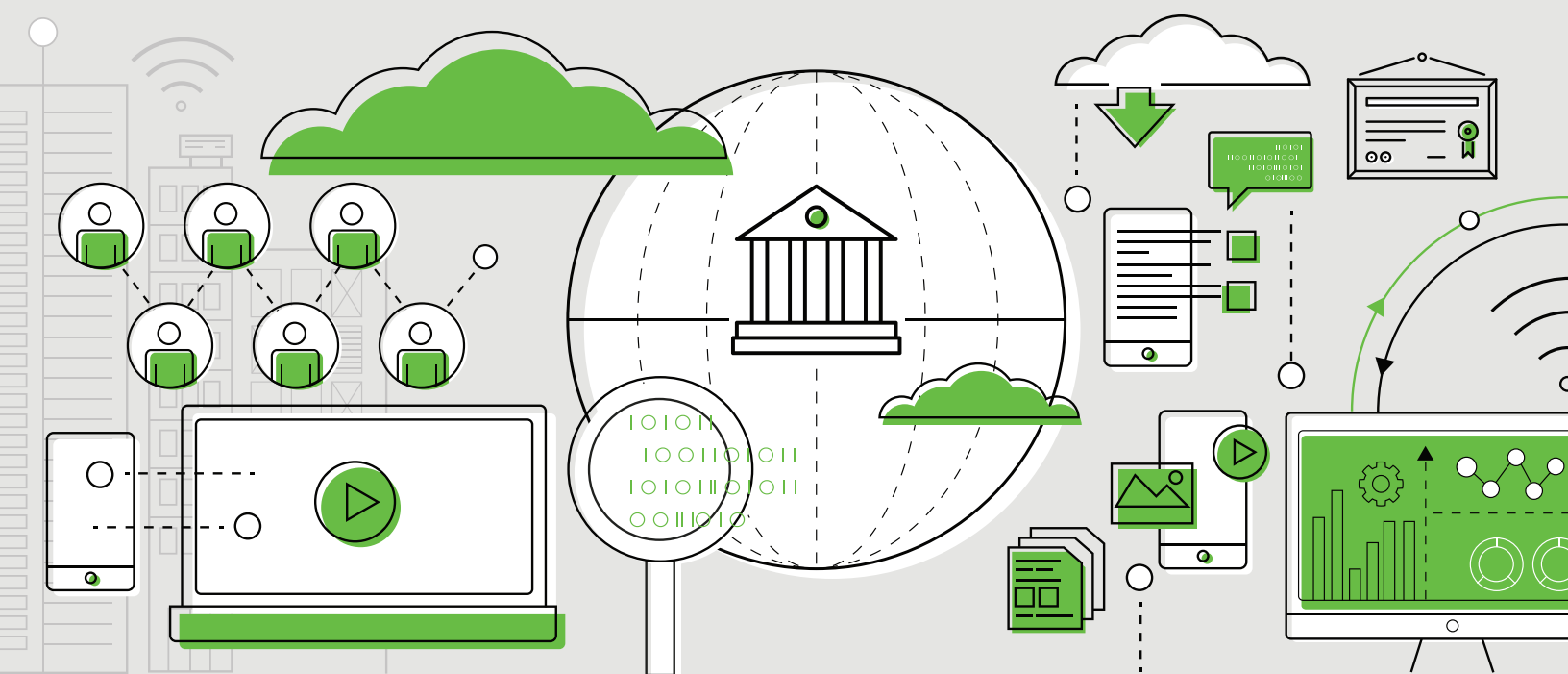


2012 CAMPUS COMPUTING

The 23rd National Survey of Computing and
Information Technology in American Higher Education

Kenneth C. Green



**THE CAMPUS
COMPUTING PROJECT**

campuscomputing.net

CAMPUS COMPUTING 2012

The 23rd National Survey of Computing and
Information Technology in American Higher Education

Kenneth C. Green

December, 2012

THE CAMPUS COMPUTING PROJECT

P.O. Box 261242

Encino, CA • 91426-1242 • USA

Tel: 818.990.2212 • Fax: 818.784.8008

www.campuscomputing.net



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Begun in 1990, The Campus Computing Project is the largest continuing study of the role of computing and information technology in American higher education.

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Additional information about The Campus Computing Project is available on the World Wide Web at: campuscomputing.net.

Past (out-of-print) editions of the annual Campus Computing Survey Report (1990-2002) are available on microfiche from the ERIC Clearinghouse Service sponsored by the US Department of Education. Please check the ERIC web site: www.eric.ed.gov

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CAMPUS COMPUTING, 2012

The 26th National Survey of Computing and Information
Technology in American Higher Education

Table of Contents

I.	Campus Computing 2012 — Executive Summary	3
II.	Campus Computing 2012 — Summary Graphics	5
III.	Campus Computing 2012 — Summary Data	20





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November 2012

The National Survey of Computing and Information Technology

A Mixed Assessment About the Effectiveness of Campus IT Investments; More Campuses Go Mobile and Slowly to the Cloud, While Fewer Experience IT Budget Cuts

New data from fall 2012 Campus Computing Survey offer a mixed assessment about the effectiveness of institutional investments in information technology. The new survey also confirms big gains in the proportion of institutions that are activating mobile apps and services for their students. Additionally, the 2012 data document the continuing decline in the number of campuses that have experienced IT budget cuts as a consequence of the economic downturn that began in 2008.

Assessing the Effectiveness of Campus IT Investments

A new question on the 2012 Campus Computing Survey reveals that senior campus IT officials offer a very mixed assessment about the effectiveness of various institutional investments in information technology. For example, three-fifths view the institutional investment in IT for library resources and for administrative information systems to be “very effective,” while just over half (55.2 percent) cite the investment in IT for on-campus instruction as “very effective.” In contrast, less than a fourth (22.7 percent) view the IT investment in “data analysis and managerial analytics” as very effective. Among CIOs at research institutions, only a two-fifths (41.7 percent) at public universities and a third (32.6 percent) in private universities assess current IT investments to support research and scholarship as “very effective.”

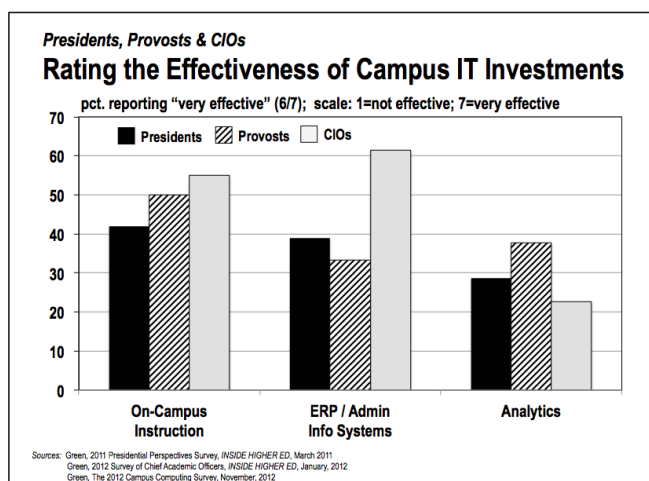
“These new data suggest that CIOs recognize the need for their institutions to extract more value from the continuing and significant dollars their campuses invest in information technology,” says Kenneth C. Green, founding director of The Campus Computing Survey. “Although colleges and universities are doing many things well with IT, for many campus officials the return on the institutional investment in information technology often falls short of both expectations and need.”

are less sanguine about campus IT investments than their IT officers: just 42.1 percent of presidents and 50.0 percent of chief academic officers view the IT investment to support on-campus instruction as “very effective,” compared to 55.2 percent of CIOs. Although 61.5 percent of CIOs report the institutional investment in administrative information systems to be “very effective,” only 39.0 percent of presidents and 33.4 percent of provosts offer a similar assessment. Interestingly, CIOs offer a lower assessment about effectiveness of IT investments to support campus analytical efforts: just 22.7 percent of CIOs view the investment in IT to support data analytics as very effective, compared to 28.6 percent of provosts and 37.7 percent of presidents.

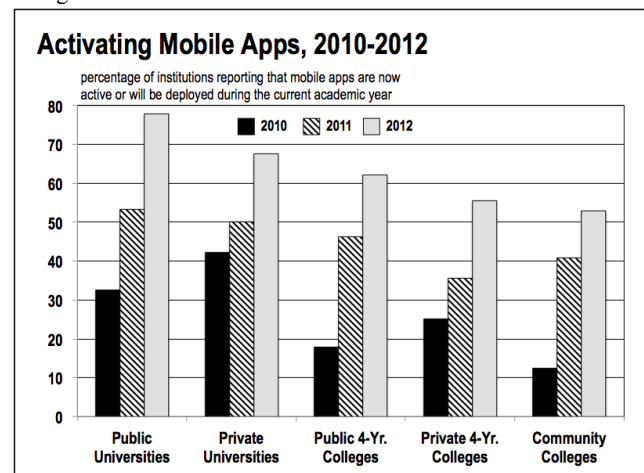
Green says that this gap in the assessments of IT effectiveness among of presidents, provosts, and CIOs could be explained in several ways: “For some campus officials these numbers reflect unfulfilled expectations, while for others it could be that both technology advocates and technology providers have frequently over-promised and under-delivered. And in other instances it may well be that institutional IT officers have failed to communicate the effectiveness of IT investments at their campuses.”

More Colleges Go Mobile

Across all sectors of higher education, the 2012 survey documents another year of big gains in the proportion of colleges and universities that have activated mobile apps. Three-fifths (60.2 percent) of the campuses participating in this year’s survey have activated mobile apps as of fall 2012 or will do so in the coming academic year, compared to two-fifths (41.5 percent) in fall 2011 and 23.1 percent in fall 2010. Across sectors, public universities lead the move to mobile: more than three-fourths (77.8 percent) report active or impending mobile apps for fall 2012, compared to 67.5 percent for private universities, and a range of 50-60 percent for public and private four-year colleges and also for community colleges.



The numbers on the effectiveness of campus IT investments become even more striking when compared to the data from two national surveys of college and university presidents and provosts that Green conducted for *Inside Higher Ed* in 2011. Taken together, the three surveys reveal that many presidents and provosts



“Several factors explain these continuing gains,” says Green. “Colleges and universities are clearly playing catch-up with the

consumer experience. Students come to campus with their smartphones and tablets expecting to use mobile apps to navigate campus resources and use campus services. Also important is that compared to two years ago, more firms – both LMS and ERP providers – now offer mobile options for their campus clients.” Green adds that some technology providers now offer free mobile apps, which also means that the costs of going mobile have changed significantly in recent years.

Fewer Campuses Experience Budget Cuts

The 2012 data indicate that just over a fourth (27.0 percent) of the surveyed institutions experienced cuts affecting the current (A/Y 2012-13) budget for central IT resources and services, down from more than a third (35.8 percent) in fall 2011, 41.6 percent in 2010, and fully half (50.0 percent) in fall 2009.

Among public institutions, about a third of universities, four-year campuses, and community colleges reported reductions in the central budget for IT fall 2012, down dramatically from 2011, when more than 54.7 percent of public universities, 43.6 percent of public four-year colleges, and 39.0 percent of community colleges experienced central IT budget cuts.

Private/non-profit institutions continue to fare better than their public counterparts: 16.3 percent of private universities experienced central IT budget cuts this year, compared to one-fourth (24.9 percent) in fall 2011 and 56.9 percent in 2009. Among private four-year colleges, the percentage reporting budget cuts fell to 18.3 percent, down from 24.7 percent in fall 2011 and 41.9 percent in 2009.

“The new data offer some generally good news, as fewer institutions experienced IT budget reductions this year than last,” says Green. “But the IT budget cuts continue for many and the proportion of public campuses experiencing IT budget reductions remains high, about a third across all sectors.” Green cites the rising demand for an array of campus IT resources and services – mobile apps, high speed wireless, IT user support services, instructional design assistance for faculty teaching online, and IT security, plus the need to refresh an aging campus IT infrastructure – as major sources of pressure on campus IT budgets, and by extension, major challenges for campus IT leaders.

Small Gains in Cloud Computing

Despite the continuing discussion in both the campus and the corporate sectors about the operational and financial benefits of Cloud Computing, the 2012 survey data show only small gains in the movement of mission-critical campus operations to the Cloud. Just 5.9 percent of the survey participants report that their campus has moved or is converting to Cloud Computing for ERP (administrative system) services, up from 4.4 percent in 2011 (range: from 10.2 percent for private universities to 2.1 percent for private four-year colleges). Similarly, just 9.8 percent have moved to Cloud Computing for storage, archiving, or business continuity services as of fall 2012, compared to 6.5 percent last year. And

of public universities have migrated these activities to the Cloud as of this fall, compared to 6.6 percent in 2011; among private universities, 7.0 percent report cloud-based HPC activities, compared to 1.1 percent last year.

Other Cloud services post higher numbers. This fall almost two-fifths of the survey participants (38.1 percent, up from 27.8 percent in 2011) report that they have moved or are migrating LMS applications to Cloud services, while a sixth (16.6 percent, up from 10.9 percent last year) indicate that their institution is using a Cloud-based CRM (Customer Relationship Management) application.

“The gains for Cloud Computing posted this year should be encouraging to both campus IT leaders and to technology providers,” says Green, although he notes that the major campus ERP providers only recently began to offer Cloud-based services to their campus clients. Even as the performance benefits and cost savings of migrating to the Cloud appear compelling, “trust really is the coin of the realm: many campus IT officers are not ready to migrate mission-critical data, resources, and services to the Cloud services offered by their IT providers.”

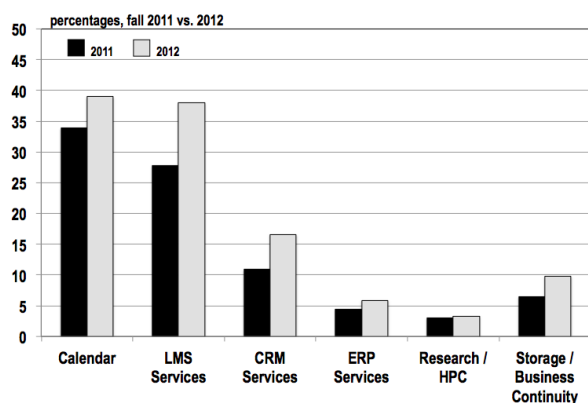
Continuing Shifts in the LMS Market

The 2012 data also document an increasing competitive campus market for Learning Management Systems (LMS). The proportion of survey participants reporting that their institution uses various versions of Blackboard (including Angel and WebCT) as the campus-standard LMS fell to 44.8 percent in fall 2012, down from 50.6 percent in 2011, 57.1 percent 2010, and 71.0 percent in fall 2006. Concurrently, Blackboard’s major LMS competitors – Desire2Learn (11.1 percent in fall 2012), Moodle (20.1 percent), and Sakai (6.1 percent) - have all gained share during this period. Additionally, Canvas by Instructure has emerged as an aggressive new competitor: 4.6 percent of the 2012 survey participants report that their institution has selected Canvas as the campus-standard LMS application, up from zero percent just three years ago.

“The campus LMS market remains a textbook example of a mature market with immature, or evolving, technologies, and that’s a prescription for both volatility and competition,” says Green. “Two-thirds of this year’s survey participants report that their campus is or will soon begin a review of the institutional LMS strategy, affirming the assessment that higher education can be a very volatile market for LMS providers.”

The 2012 Campus Computing Survey is based on survey data provided by senior campus IT officials, typically, the CIO, CTO, or other senior campus IT officer, representing 542 two- and four-year public and private/non-profit colleges and universities across the United States. Survey respondents completed the online questionnaire from September 20 through October 26th. Copies of the 2012 Campus Computing Survey will be available on December 15th from The Campus Computing Project in Encino, CA (campuscomputing.net). Price: \$45, which includes shipping to US addresses.

Slow Migration to Cloud Computing



although Cloud Computing should offer significant benefits for research and high performance computing (HPC) activities, just 8.3

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

The 2012 Campus Computing Survey was supported, in part, by the following sponsors: Adobe Systems, Apple, Blackboard, Blackboard Connect, Campus Management, CampusWorks, Canvas by Instructure, CDW-G, Cengage Learning, The Center for Digital Education, ConnectEDU, Copia Interactive, CourseSmart, Datatel, Dell, Desire2Learn, Echo360, Eduventures, Ellucian, Follett Higher Education Group, Google, Hobsons, IBM Higher Education, Jenzabar, Kaltura, Kaplan, Longsight Group, McGraw-Hill Higher Education, Microsoft, Moodlerooms, Oracle, Pearson Education, Perceptis, rSmart Group, Sonic Foundry, SONY, Touchnet Information Systems, Turnitin, Unicon, and Workday.

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PO Box 261242 • Encino, CA 91426-1242 • USA
TEL: 818.990.2212 • FAX: 818.979.6113 • campuscomputing.net

CAMPUS COMPUTING, 2011

CAMPUS COMPUTING, 2012

The 23th National Survey of Computing and
Information Technology in US Higher Education

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CAMPUS COMPUTING, 2011

Methodology

- 543 institutional participants
- Web-based data collection
- Survey period: Sept 20 – Oct 26
- 70 pct. of the 2012 institutions also participated in the 2011 survey

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2012 Survey Participants

<u>Category</u>	Dept of Ed N (adjusted)	<u>Survey N</u>	<u>Participation Rate (pct.)</u>
Public Research & Doctoral Universities	168	72	43%
Private Research & Doctoral Universities	92	43	47%
Public 4-Year Colleges (Baccalaureate & Masters)	374	108	29%
Private 4-Year Colleges (Baccalaureate & Masters)	824	191	23%
Associate Degree/ Public Community Colleges	1018	129	13%

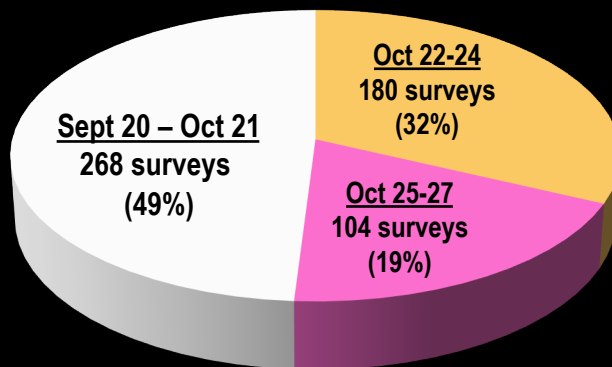
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Why Survey Researchers Send (lots of) Annoying eMail Reminders

543 Participating Institutions



- 51 pct. of the surveys were submitted in the final week
- 19 pct. of the surveys arrived after the Oct 24 deadline

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2012 Highlights

- Assisting faculty with the instructional integration of IT returns as a top CIO priority
- Big gains (again) in the deployment of mobile apps
- Budget cuts continue to decline, but public campuses more at risk than privates.
- Mixed assessments from presidents, provosts, and CIOs about the effectiveness of IT investments
- Still searching for the Clouds!
- Transitions continue in the LMS market

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CAMPUS COMPUTING, 2011

Single Most Important IT Issue, 2000-2008

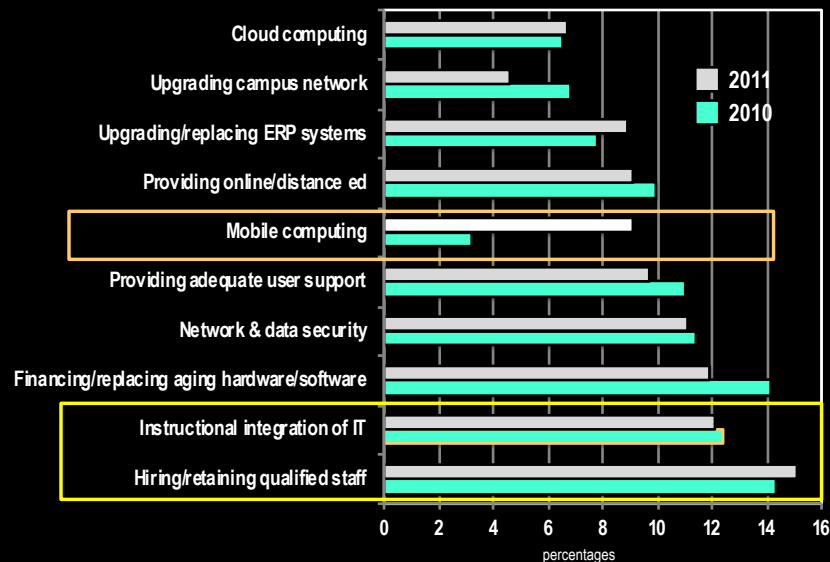
Trends, 2000-2008

2000	2001	2002	2003	2004	2005	2006	2007	2008
Assisting Faculty Integrate IT into Instruction (40.5%)	Assisting Faculty Integrate IT into Instruction (31.5%)	Assisting Faculty Integrate IT into Instruction (24.3%)	Assisting Faculty Integrate IT into Instruction (21.4%)	Network & Data Security (21.1%)	Network & Data Security (30.0%)	Network & Data Security (29.5%)	Network & Data Security (25.5%)	Network & Data Security (20.3%)
User Support (22.3%)	User Support (15.4%)	Upgrade/Replace ERP (18.9%)	Upgrade/Replace ERP (17.6%)	Assisting Faculty Integrate IT into Instruction (18.5%)	Assisting Faculty Integrate IT into Instruction (17.9%)	Assisting Faculty Integrate IT into Instruction (17.3%)	Upgrade/Replace ERP (13.0%)	Hiring/Retaining IT Staff (16.7%)
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 (16.1%)	Upgrade/Replace ERP (16.3%)	Hiring/Retaining IT Staff (12.3%)	Assisting Faculty Integrate IT into Instruction (11.9%)

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Single Most Important IT Issue, 2010 and 2011



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CAMPUS COMPUTING, 2011

Top Institutional IT Priorities Over the Next Two-Three Years, Fall 2012

percentage who report "very important" (6/7) scale: 1=not important; 7=very important	%
Assisting faculty integrate IT into instruction	74
Providing adequate user support	70
Hiring/retaining qualified IT staff	69
Providing online education	61
Implementing / supporting mobile computing	61
Upgrading / enhancing network & data security	54
Financing the replacement of aging IT	50
Upgrading / replacing the campus network	42
Migrating to Cloud computing	33
Upgrading / replacing Admin IT / ERP systems	25
Upgrading / replacing emergency comm.	16

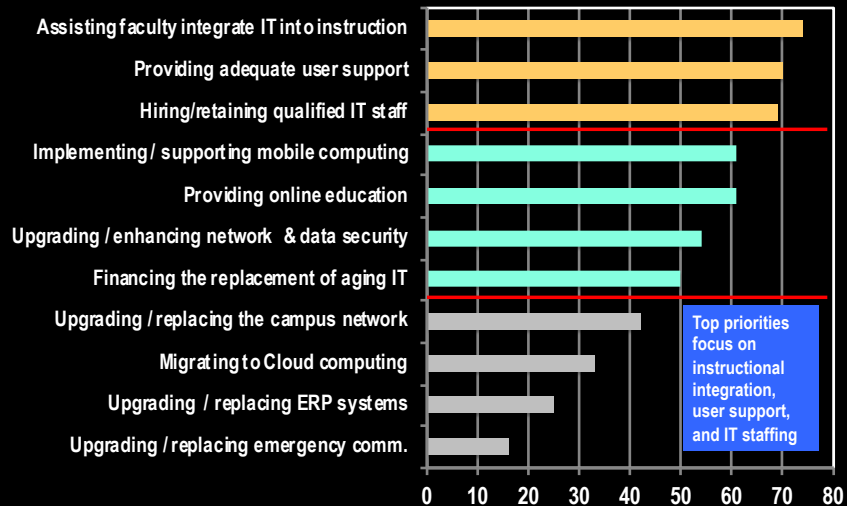
Top priorities focus on instructional integration, user support, and IT staffing

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Top Institutional IT Priorities Over the Next Two-Three Years (Fall 2012)

pct. reporting "very important" (6/7)
scale: 1=not important; 7=very important



Top priorities focus on instructional integration, user support, and IT staffing

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Top Institutional IT Priorities by Sector, Fall 2012

All Campuses	Public Universities	Private Universities	Public 4-Yr. Colleges	Private 4-Yr. Colleges	Community Colleges
Assisting Faculty Integrate IT into Instruction (74%)	Providing Online Ed on the Web (73%)	Assisting Faculty Integrate IT into Instruction (81%)	Hiring/Retaining Qualified IT Staff (82%)	Assisting Faculty Integrate IT into Instruction (74%)	Assisting Faculty Integrate IT into Instruction (71%)
Providing Adequate User Support (70%)	Assisting Faculty with IT in Instruction & Hiring/Retaining Qualified Staff (tie: 72%)	Upgrading / enhancing network & data security (63%)	Providing Adequate User Support (76%)	Providing Adequate User Support (69%)	Providing Online Ed on the Web (73%)
Hiring/Retaining Qualified IT Staff (68%)	Providing Adequate User Support (67%)	Hiring/Retaining Qualified IT Staff (68%)	Assisting Faculty Integrate IT into Instruction (74%)	Hiring/Retaining Qualified IT Staff (68%)	Hiring/Retaining Qualified IT Staff (64%)

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Top Institutional IT Priorities, 2012

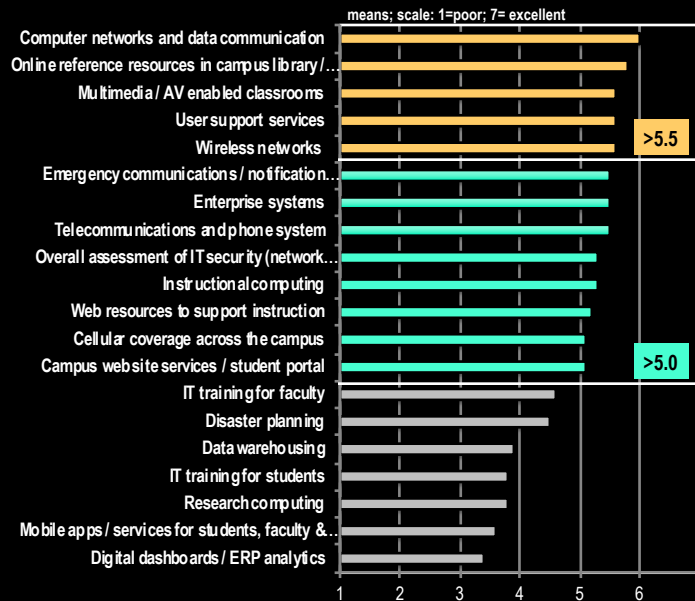
	Campus Computing Survey (pct.. reporting "very important")	EDUCAUSE "Top 10 IT Issues" (panel assessment)
1	Assisting faculty integrate technology into instruction (74%)	Updating IT professional skills and roles
2	Providing adequate user support (70%)	Supporting trends towards consumerization and BYOD
3	Hiring / retaining qualified IT staff (69%)	Developing a campus-wide cloud strategy
4	TIE: Providing online ed via the web and implementing/supporting mobile computing (61%)	Improving operational efficiency through the use of IT resources
5	Upgrading/enhancing network & data security (54%)	Integrating IT into institutional decision-making
6	Financing the replacement of aging IT (50%)	Using analytics to support institutional outcomes
7	Upgrading/enhancing the campus network (42%)	Funding IT strategically
8	Migrating to Cloud computing (33%)	Transforming the institution's business with IT
9	Upgrading/enhancing administrative IT / ERP systems (24%)	Supporting the research mission through HPC, large data, and analytics
10	Upgrading/enhancing emergency comm. (16%)	Establishing and implementing IT governance

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CAMPUS COMPUTING, 2011

Rating the IT Infrastructure



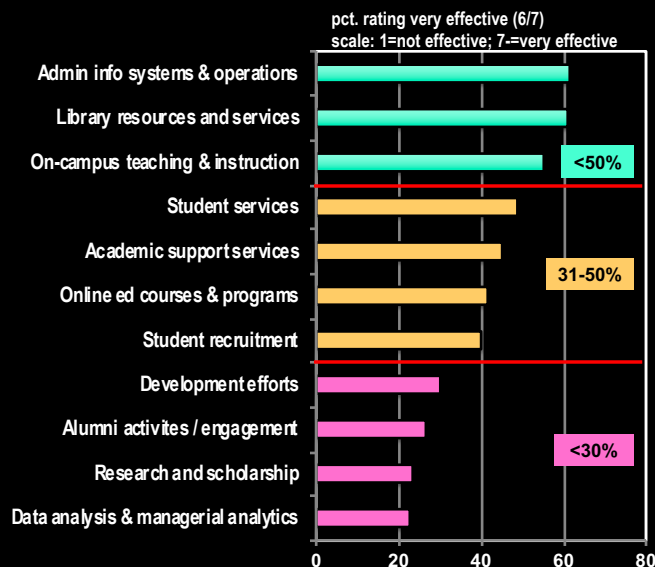
- Highest rankings for the network, "hardware," and content
- Would faculty and students agree with the high ranking for user support services?

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Rating the Effectiveness of Campus Investments in Information Technology

NEW



- Very mixed assessments about the effectiveness of campus IT investments

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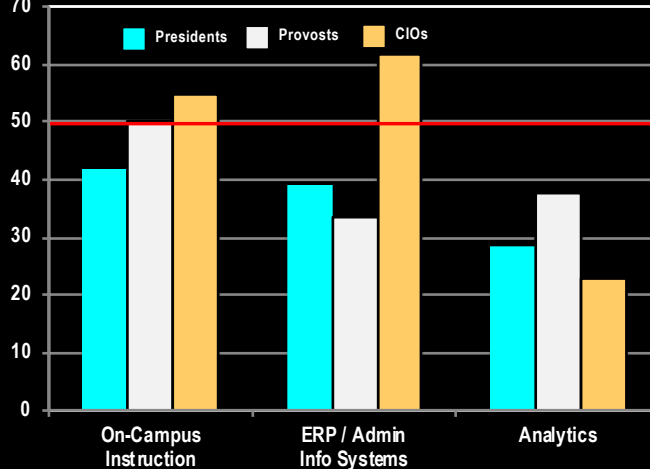


CAMPUS COMPUTING, 2011

Presidents, Provosts & CIOs

Rating the Effectiveness of Campus IT Investments

pct. reporting "very effective" (6/7); scale: 1=not effective; 7=very effective



- Presidents and provosts are generally less sanguine about the effectiveness of IT investments than their IT officers.

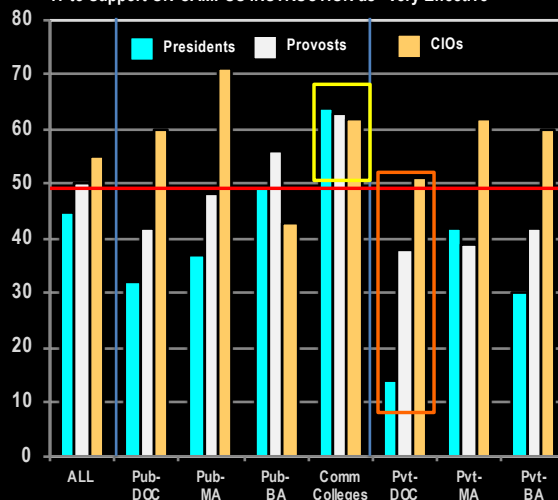
Sources: Green, Presidential Perspectives Survey, *INSIDE HIGHER ED*, March 2011
Green, CAO Survey, *INSIDE HIGHER ED*, Jan 2012
Green, Campus Computing 2012, Nov, 2012

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The Effectiveness of IT Investments to Support Instruction

pct. of Presidents, Provosts, and CIOs Who Assess the Campus Investment in IT to Support ON-CAMPUS INSTRUCTION as "Very Effective"



- CIOs: 94 pct. agree that "technology has done much to improve instruction on my campus"
- Effectiveness of IT Investment to Support Instruction: Less than half of presidents and provosts report investments in technology to support on-campus instruction have been "very effective."

Sources: Green, Presidential Perspectives Survey, *INSIDE HIGHER ED*, March 2011
Green, CAO Survey, *INSIDE HIGHER ED*, Jan 2012
Green, Campus Computing 2012, Nov, 2012

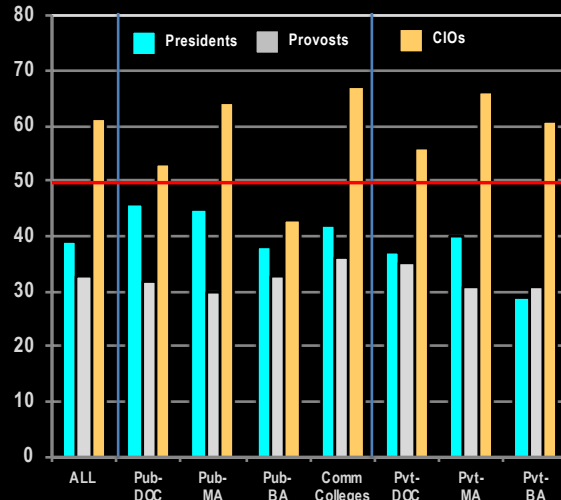
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The Effectiveness of IT Investments in Admin Info Systems

Pct. of Presidents, Provosts, and CIOs Who Assess the Campus Investment in IT for ADMIN INFORMATION SYSTEMS as "Very Effective"



Sources: Green, Presidential Perspectives Survey, *INSIDE HIGHER ED*, March 2011
Green, CAO Survey, *INSIDE HIGHER ED*, Jan 2012
Green, Campus Computing 2012, Nov, 2012

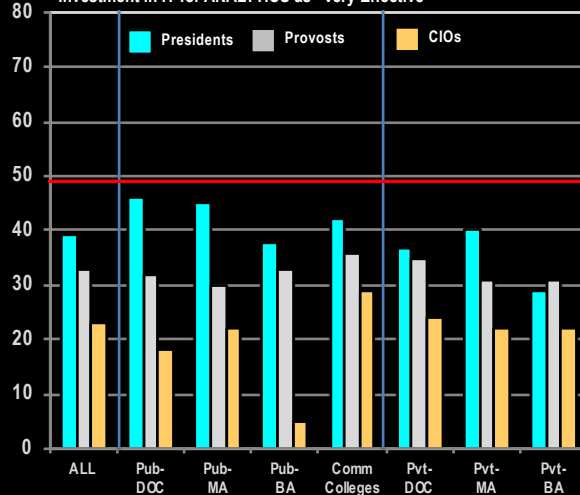
- Less than half of presidents and provosts report investments in technology to support administrative systems have been "very effective."

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The Effectiveness of IT Investments in Analytics

pct. of Presidents, Provosts, and CIOs Who Assess the Campus Investment in IT for ANALYTICS as "Very Effective"



Sources: Green, Presidential Perspectives Survey, *INSIDE HIGHER ED*, March 2011
Green, CAO Survey, *INSIDE HIGHER ED*, Jan 2012
Green, Campus Computing 2012, Nov, 2012

- Less than a fourth of CIOs report investments in technology to support analytics have been "very effective," compared to a third of provosts and two-fifths of presidents.

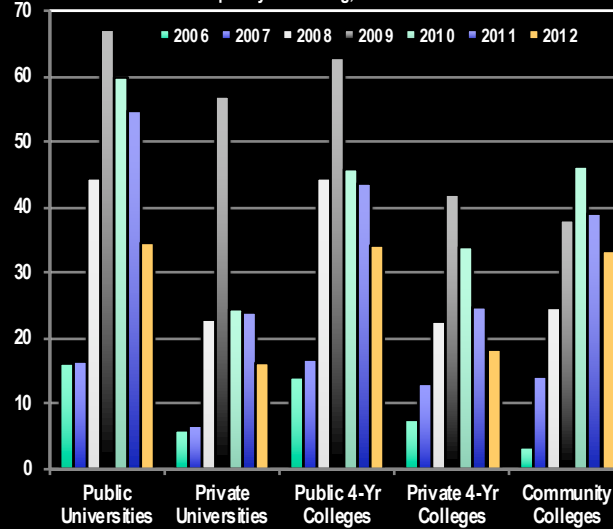
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CAMPUS COMPUTING, 2011

Budget Cuts, 2006-2012

percentage of institutions reporting budget reductions for central IT services over prior year funding, 2006-2012



- **THE GOOD NEWS:** big declines in budget cuts
- Still experiencing the compounding consequences of continuing budget cuts
- Privates fare better than publics
- One-sixth (16 pct.) experienced additional mid-year cuts, averaging about 1.5 pct.

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ERP Expenditures

(estimated annual expenditures for licensing and maintenance fees)

NEW

means by sector, thousands of dollars

	ALL	Pub Univ.	Pvt Univ.	Pub 4-Yr.	Pvt 4-Yr.	Comm. College
Finance & Accounting	\$ 143	490	265	104	47	77
Student Info. System	189	525	240	179	77	149
HR - Recruitment	47	128	35	47	20	42
HR - Records & Payroll	120	382	219	69	36	87
LMS	123	275	133	113	69	114
Alumni/ Development	46	115	110	28	34	22
Est. TOTAL	\$ 669	1,915	1,003	540	283	493
% of Central IT \$	8.6%	8.0%	6.7%	8.9%	8.0%	12.8%

- ERP accounts for about 8-9 pct. of central IT expenditures.
- Less dollars for ERP in community colleges but a larger proportion of the IT budget

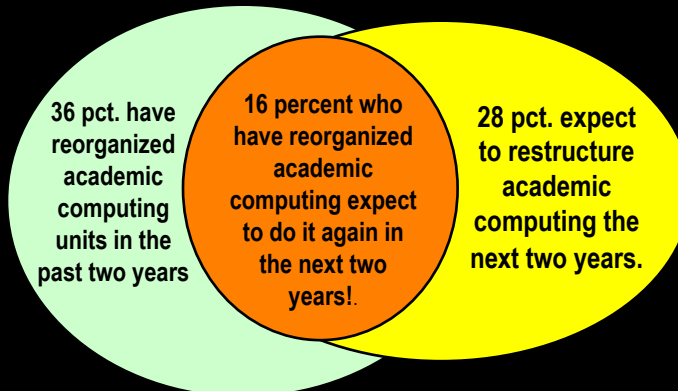
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Reorganizing IT Units, Fall 2012

Organizational structures for many IT units are in transition.

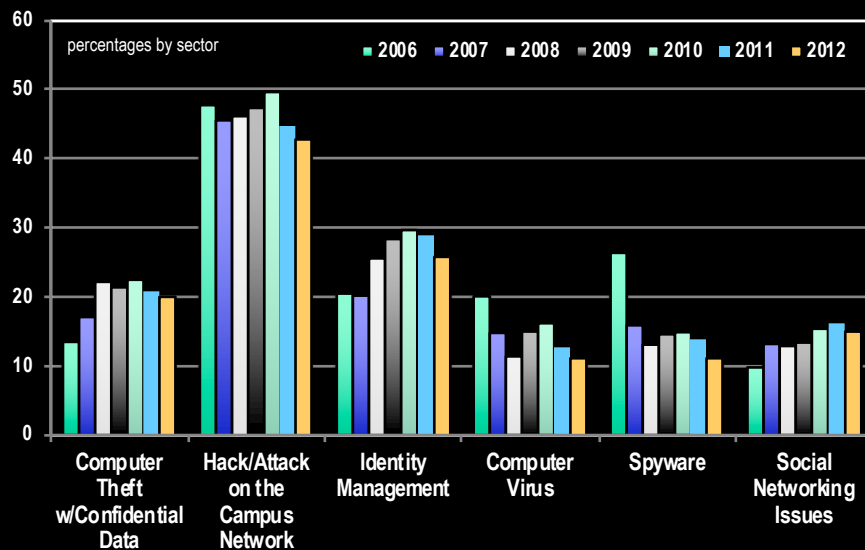



Little change in these numbers in recent years

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IT Security

IT Security Incidents, A/Y 2006 - 2012



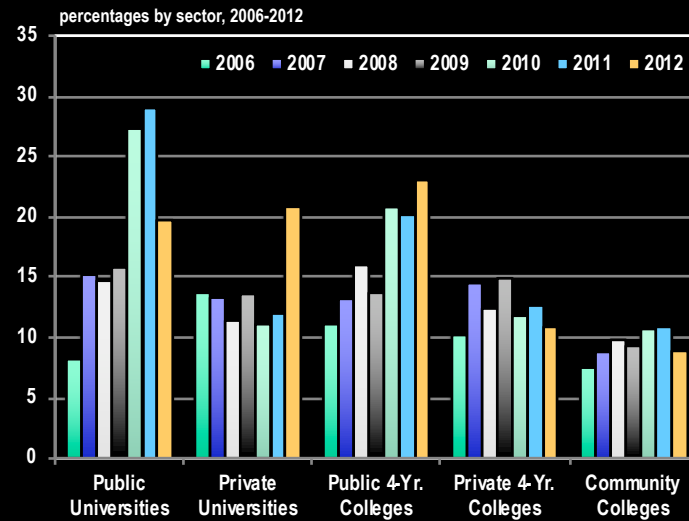
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IT Security

Student Security Incident Linked to a Social Networking Site



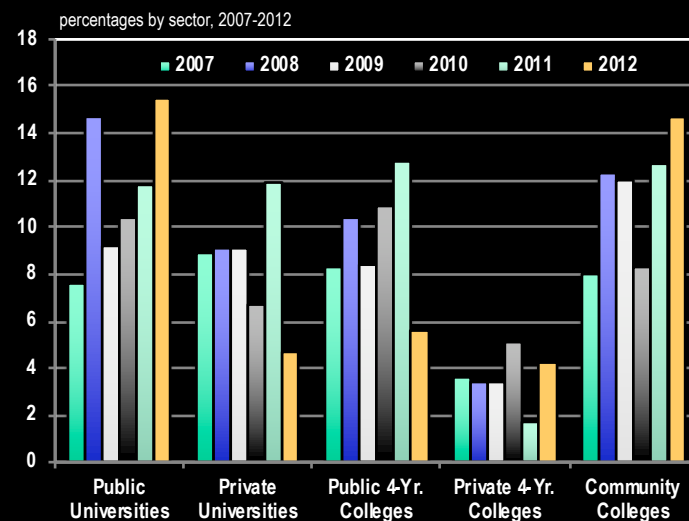
- Social networks continue to present campus security challenges

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IT Security

Intentional Employee Misconduct Affecting IT Security



- Employee misconduct reflects rising stress levels among IT staff

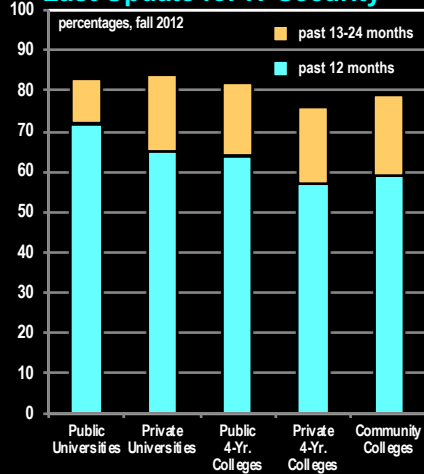
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CAMPUS COMPUTING, 2011

Updating Campus IT Security & Disaster Plans


Last Update for IT Security



- 25 pct. DO NOT have a strategic plan for network security
- 39 pct. DO NOT have a strategic plan for IT disaster recovery

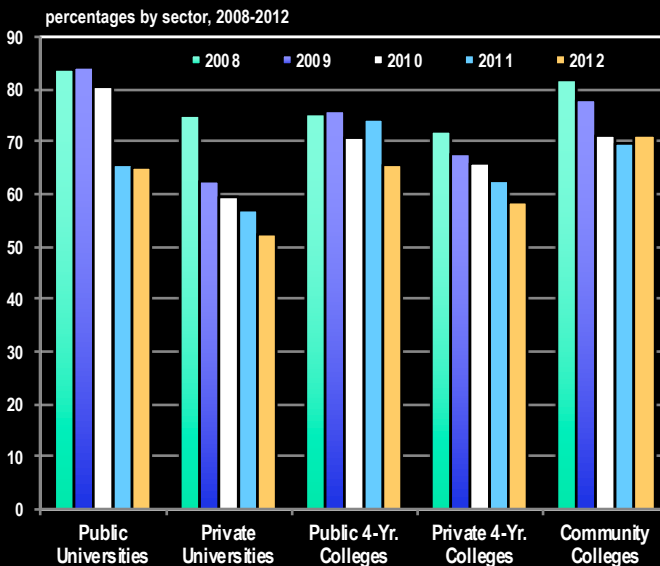
Last Update for IT Disaster Recovery




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Emergency Notification

Participation Strategy: "Opt-In" (User Must Register)



- Notification systems are of limited value if large numbers of campus users have no access
- Lower numbers are better; more users pre-registered

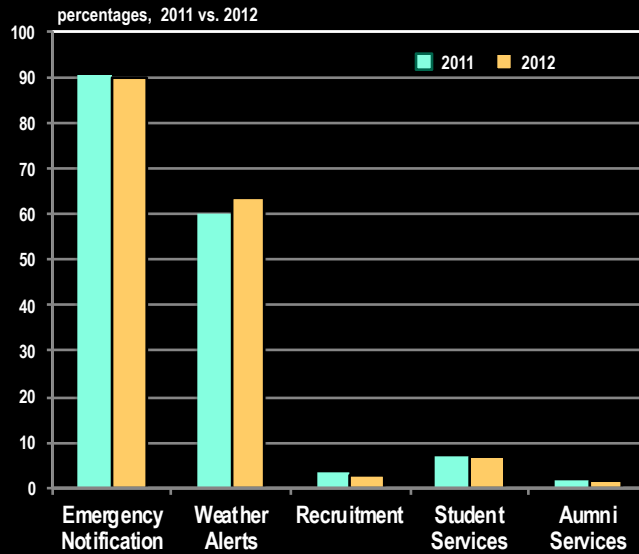
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Emergency Notification

Deploying the Notification System



- Seeking new opportunities to extract value from the notification system
- More use increases the risk of text spam



Let's Talk About Clouds



CAMPUS COMPUTING, 2011

Where are the Clouds?

High Clouds
ERP & HPC

A fifth of campuses (24 pct.) have a strategic plan for Cloud Computing, up from 21 pct. in 2011, 15 pct. in 2010 and 9 pct. in 2009.

Middle Clouds
CRM & LMS

Low Clouds
mail & calendar

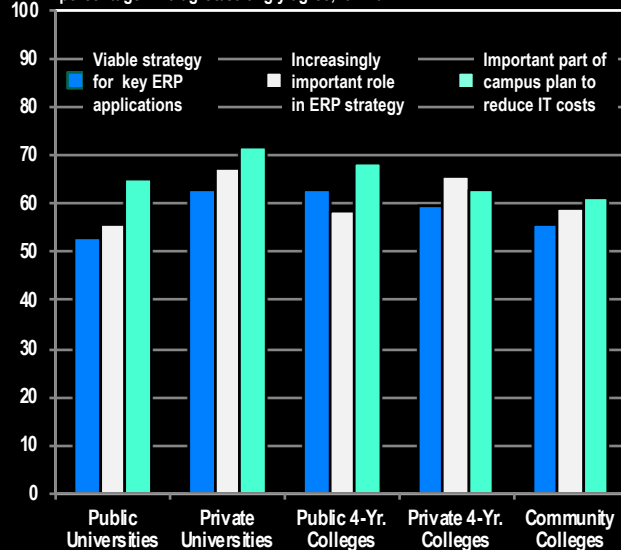
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Affirming the Strategic Importance of the Cloud

NEW

percentage who agree/strongly agree, fall 2012



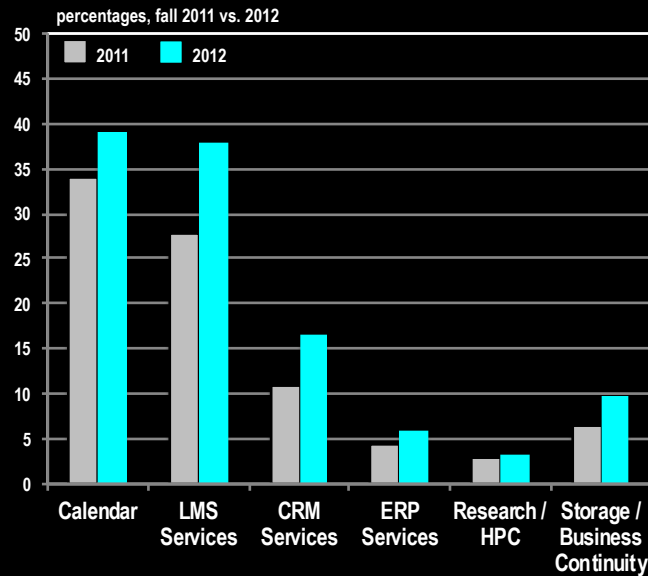
- Across all sectors, a clear message that CIOs view moving ERP to the Cloud as strategic for their institution.

The Campus Computing Project



CAMPUS COMPUTING, 2011

The Cloud Slow Migration to Cloud Computing

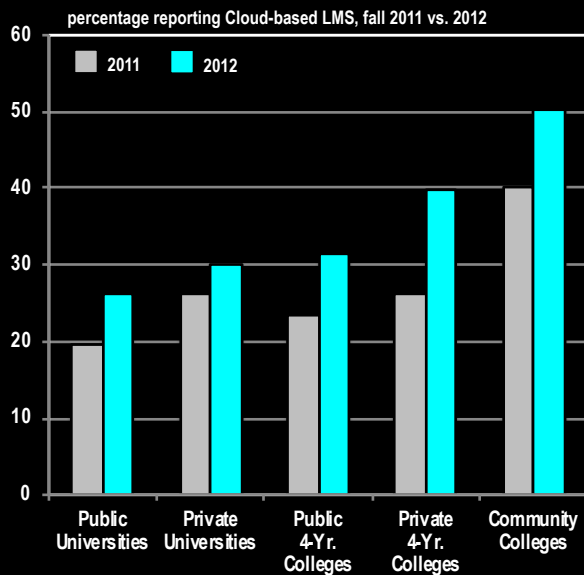


Still little movement to the Cloud for the Really "Big" Tasks

- Risk
- Limited Options from Providers
- Trust
- Control

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LMS Moves to the Clouds



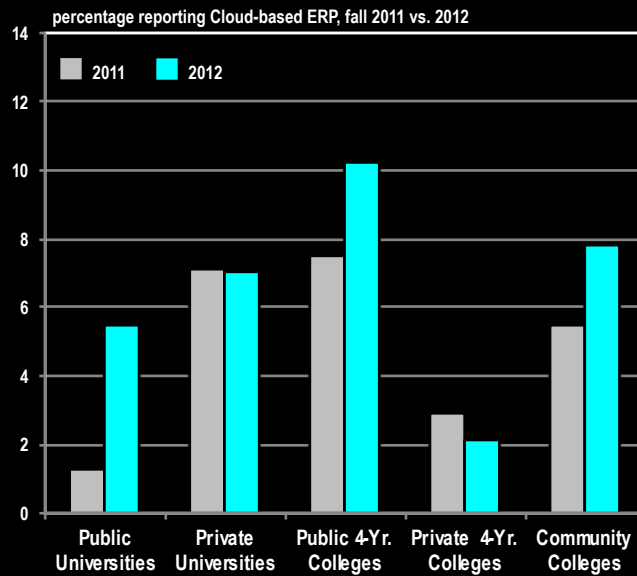
LMS as the "toe in the Cloud" experience for higher education?

The Campus Computing Project 



CAMPUS COMPUTING, 2011

ERP Moves (Slowly) to the Cloud



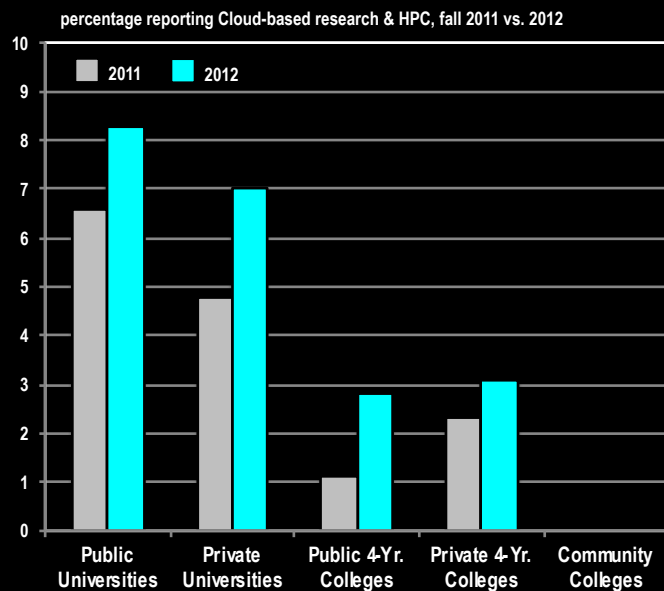
Do Multi-Campus System Structures Foster Migration to the Cloud for ERP?

- Public 4-Yr Colleges
- Community Colleges

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Research and HPC Move (Slowly) to the Cloud



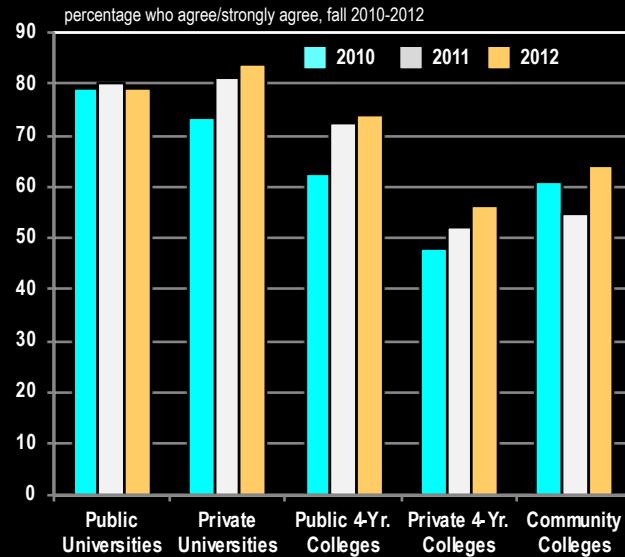
Departmental vs. institutional strategies, initiatives, and deployment?

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CAMPUS COMPUTING, 2011

"Lecture Capture is an Important Part of Our Campus Plan for Developing & Delivering Instructional Content"

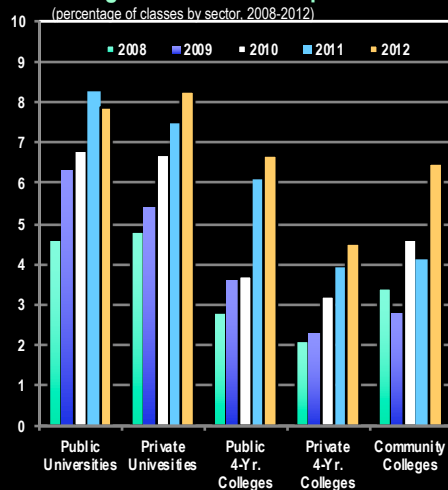


- Slight gains in the importance of Lecture Capture?
- Deployment remains low – about 6 pct. vs. 5 pct. in fall 2011
 - Range from 8.3 pct. in Pvt Univ to 4.5 pct. in Pvt Colleges

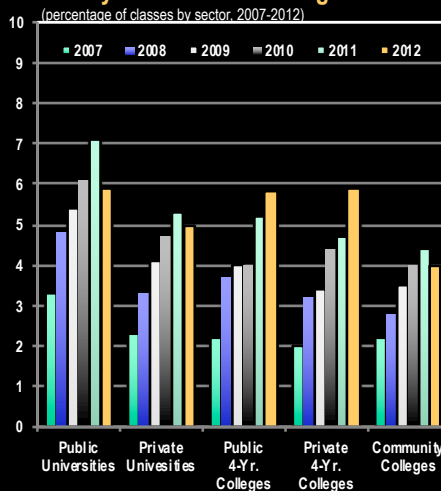
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Lecture Capture and Podcasting

Rising Use of Lecture Capture



Steady Gains in Podcasting



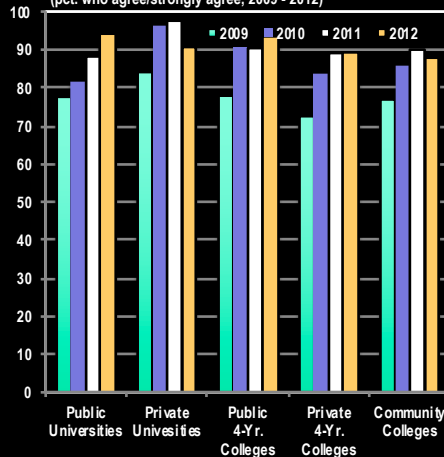
The Campus Computing Project 



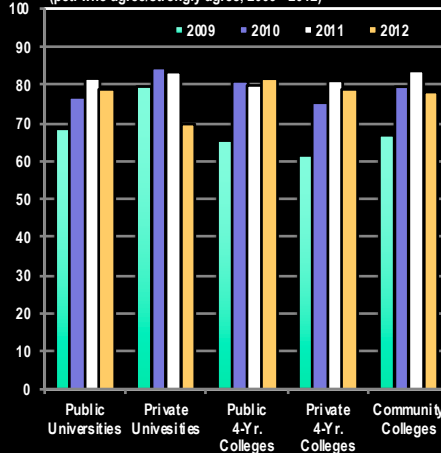
CAMPUS COMPUTING, 2011

The Future (Still!) Bodes Well for eBooks!

eBook Content Will be an Important Source for Instructional Resources in Five Years
(pct. who agree/strongly agree, 2009 - 2012)



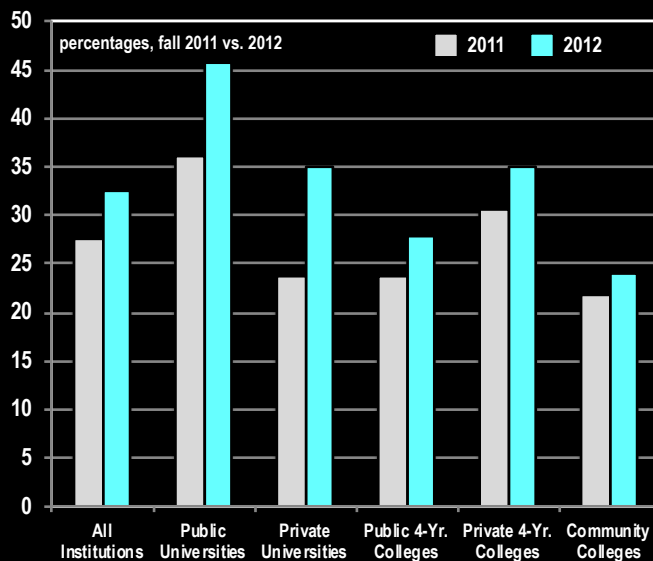
eBook Readers Will be an Important Platform for Instructional Content in Five Years
(pct. who agree/strongly agree, 2009 - 2012)



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Encouraging the Use of the Creative Commons License for Digital Content



Producers vs. users

- Survey question focuses on the faculty as producers of digital content
- Uncertain impact on the faculty prerogative to select course materials

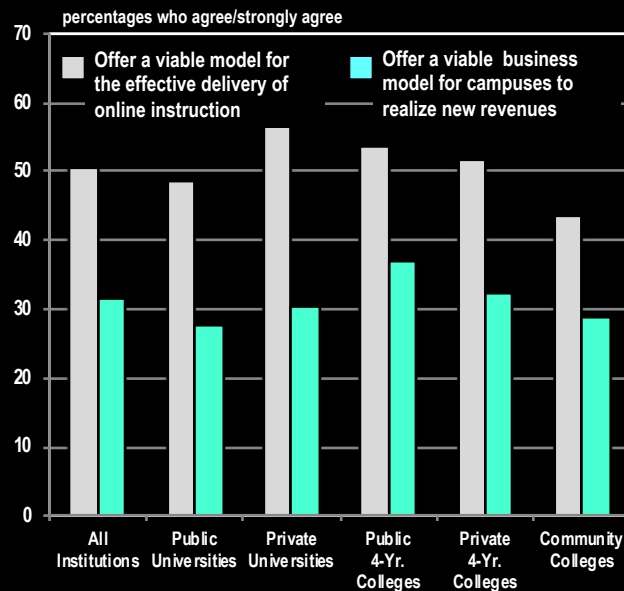
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CAMPUS COMPUTING, 2011

Much Ado About MOOCs?

NEW



- A bare majority of CIOs see MOOCs as viable model for online instruction
- More than two-thirds of CIOs are uncertain about the revenue model

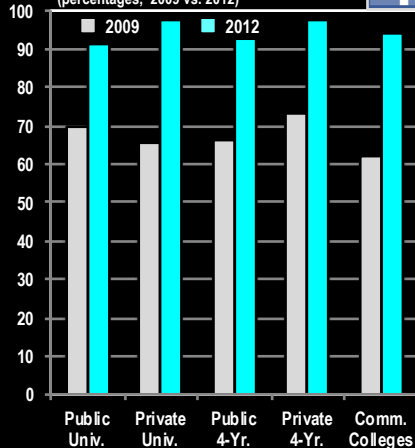
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Institutional Use of Social Media

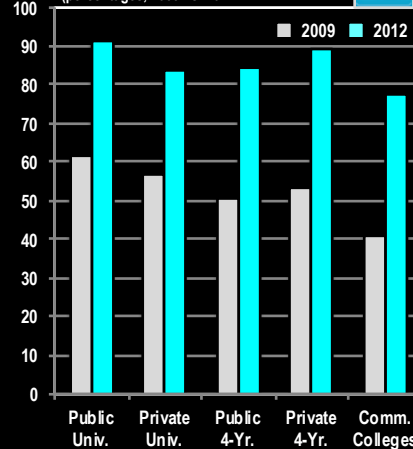
Campus Presence on Facebook

(percentages, 2009 vs. 2012)



Campus Presence on Twitter

(percentages, 2009 vs. 2012)



The Campus Computing Project

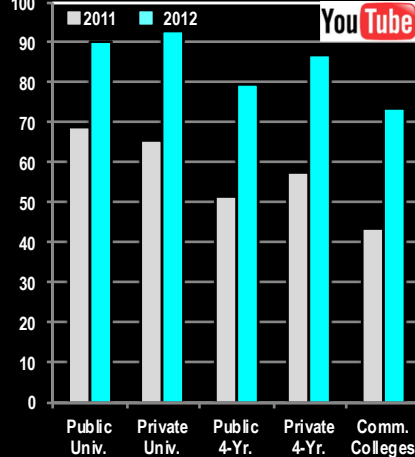


CAMPUS COMPUTING, 2011

Institutional Use of Other Media

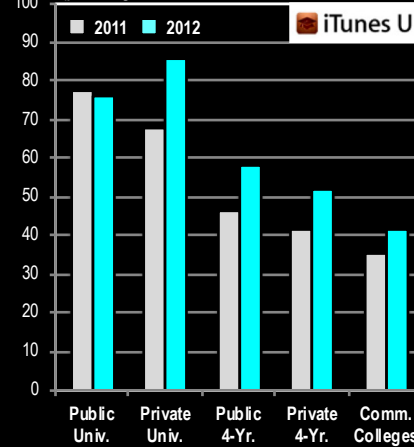
Campus Presence on YouTube

(percentages, 2009 vs. 2012)



Campus Presence on iTunesU

(percentages, 2009 vs. 2012)



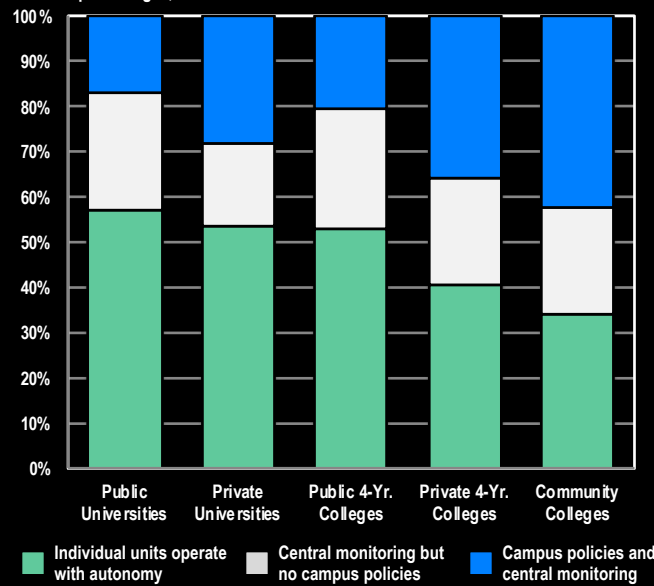
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Managing and Monitoring Social Media

NEW

percentages, fall 2012



- Wide range of institutional policies and monitoring activities across sectors.

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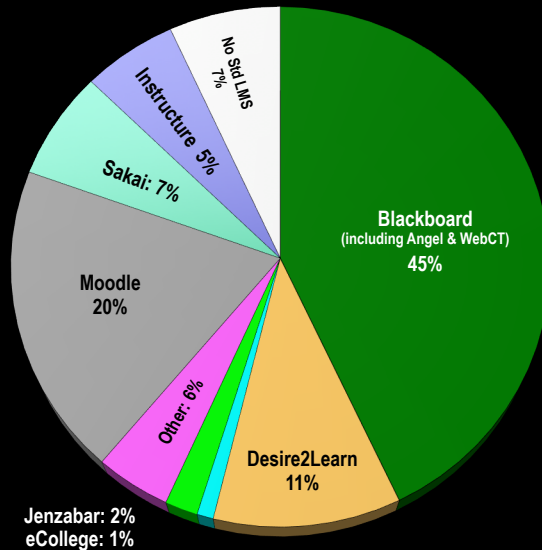


CAMPUS COMPUTING, 2011


A Profile of the LMS Market, Fall 2012

Does your campus have a single [campus-wide] LMS?

(percentages, all institutions)



- **Topping off on LMS use?** CIOs estimate that 58 pct. of classes are using the LMS, little changed from 2011 but up from 17 pct. in 2000.
- Blackboard share down from 57 pct. in 2010, 71 pct. in 2006.

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Institutional Demography of LMS Providers, 2012

percentage of campuses reporting a campus-standard LMS, fall 2012

	All	Pub Univ	Pvt Univ	Pub 4-Yr	Pvt 4-Yr	Comm Coll
Bb	44.8	52.8	62.8	48.2	39.3	39.5
D2L	11.4	6.9	2.3	19.4	2.1	24.0
eCollege	1.3	1.4	--	0.9	1.1	2.3
Instructure	4.6	9.7	2.3	0.9	3.1	7.8
Jenzabar	2.0	--	--	--	5.2	0.8
Moodle	20.1	5.6	9.3	16.7	34.6	13.2
Sakai	6.1	9.7	11.6	6.5	6.8	0.8

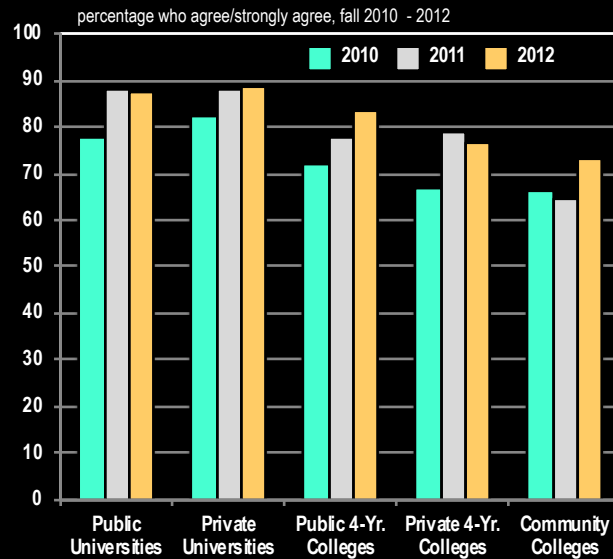
- Market presence often varies by sector
- Two-thirds of campuses report plans to review the current LMS strategy for budget or other reasons

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CAMPUS COMPUTING, 2011

"Mobile Apps are an Important Part of Our Campus Plan to Enhance Instr. Resources & Campus Services"

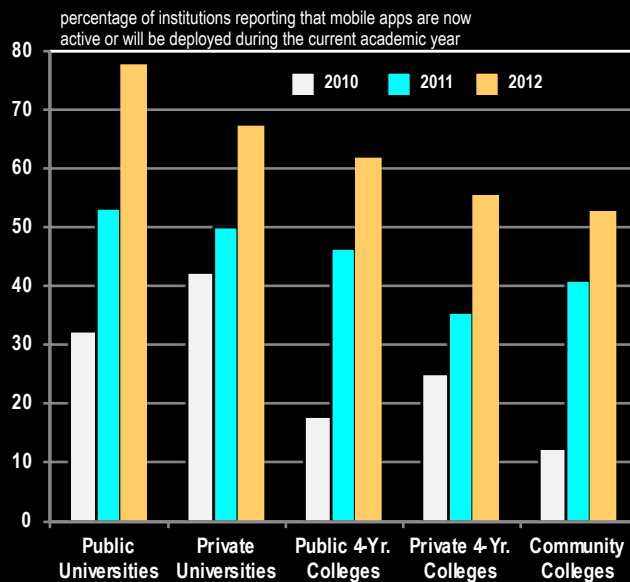


- Small but steady gains in percentage of campuses that view lecture capture as a key instructional resource.

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Activating Mobile Apps, Fall 2010-2012



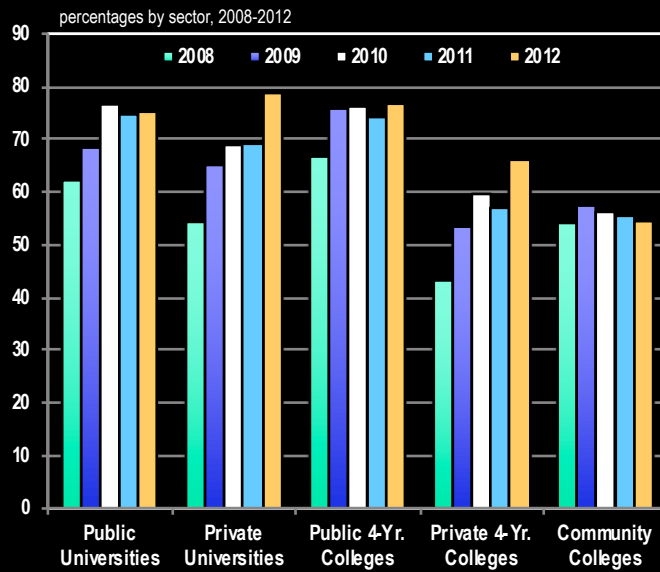
- Big gains (again) over the past 12 months
- Impact of student expectations and consumer market experience
- More (LMS & ERP) mobile app & service providers means a wide range of costs for deployment

The Campus Computing Project



CAMPUS COMPUTING, 2011

Campus License for Antiplagiarism Software



- CIOs estimate that about one-fifth of courses use anti-plagiarism software to check student papers

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Some Key IT Issues

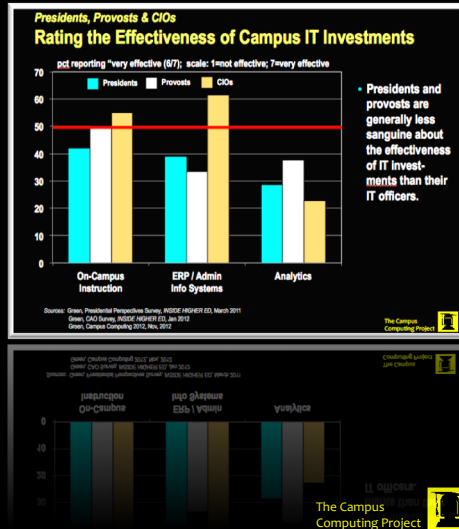


www.campuscomputing.net

CAMPUS COMPUTING, 2011

Mixed Rating on the Effectiveness of Campus IT Investments

- Very mixed assessments from presidents, provosts, and IT officers about the effectiveness of IT investments
- Unrealistic expectations about the impact on instruction and operations?
- Over-promised and under-delivered?
- *"A failure to communicate?"*



Continuing Impact of Budget Cuts

- ◆ Impact on resources, services, and infrastructure
- ◆ Compounding consequences of cuts early in decade, new cuts, plus mid-year cuts.
- ◆ Struggling to meet rising expectations and demand with fewer resources
- ◆ Rising stress on IT units and individuals



CAMPUS COMPUTING, 2011

Where Are The Clouds? Why the Delay?

- Low, but slowly rising levels of deployment for core ERP and research services.
- Trust is the “coin of the realm”
- LMS: “a toe in the clouds”



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CAMPUS COMPUTING 2012

The National Survey of Computing and Information Technology in American Higher Education

	All Institutions	Universities Public	Private	4-Year Colleges Public	Private	Community Colleges
Number of Institutions	543	72	43	108	191	129
GENERAL CAMPUS POLICIES ABOUT DESKTOP COMPUTERS						
Does your institution have a written policy / code of conduct / acceptable or appropriate use policy for:						
Campus e-mail accounts?	94.1	93.1	97.7	95.4	93.2	93.8
Campus-hosted individual / personal Web pages?	64.3	75.0	81.4	70.4	60.2	53.5
Duplication of copyrighted software / software piracy?	94.7	97.2	97.7	95.4	93.7	93.0
Fair use of copyrighted content (books, articles, etc.)?	89.3	88.9	95.3	88.9	86.9	91.5
Downloading commercial music / videos from the Web?	85.5	91.7	93.0	84.3	88.0	76.7
Student use of social networking sites (Facebook, Twitter, etc.)?	23.8	26.4	23.3	14.8	28.3	23.3
Does your institution have a special computer use / technology fee or annual / term computer use charge for all students?	56.4	77.8	27.9	75.9	38.7	63.6
Average total annual (full-time) student fee or charge for A / Y 2012-13	\$ 212	\$ 216	\$ 226	\$ 218	\$ 276	\$ 146
Do you require or strongly recommend:						
<i>Computers or laptops for all undergraduate students</i>						
No	54.1	55.6	41.9	57.4	33.5	85.3
Recommend	40.5	36.1	46.5	36.1	60.7	14.7
Require	5.3	8.3	11.6	6.5	5.8	-
<i>Computers or laptops for undergraduates in specific disciplines or academic programs</i>						
No	48.3	29.2	27.9	46.3	40.8	78.3
Recommend	35.4	38.9	39.5	38.0	47.6	11.6
Require	16.4	31.9	32.6	15.7	11.5	10.1
<i>Tablet devices (iPads, etc.) for all students</i>						
No	95.6	95.8	93.0	97.2	94.2	96.9
Recommend	4.1	4.2	7.0	1.9	5.2	3.1
Require	0.4	-	-	0.9	0.5	-
<i>Tablet devices (iPads, etc.) for students in specific disciplines or academic programs</i>						
No	86.2	80.6	74.4	87.0	86.4	92.3
Recommend	7.2	11.1	7.0	6.5	7.9	4.7
Require	6.6	8.3	18.6	6.5	5.8	3.1
<i>percentages</i>						
As you think about institutional priorities for IT resources and services over the next three years, how do you rate the importance of the following IT issues? percent reporting "very important"						
Assisting faculty integrate technology into instruction	74.0	72.2	81.4	74.8	74.3	71.3
Migrating to Cloud computing	33.0	30.6	27.9	42.1	34.0	27.1
Financing the replacement of aging hardware / software	50.2	54.2	37.2	53.3	46.6	55.0
Hiring / retaining qualified IT staff	68.8	72.2	60.5	82.2	64.9	64.3
Implementing / supporting mobile computing	60.7	62.5	55.8	60.7	59.2	63.6
Providing adequate user support	69.7	66.7	58.1	75.7	68.6	72.1
Providing online / distance education via the Web	60.7	73.6	53.5	65.4	49.7	68.2
Upgrading / replacing the campus network	42.3	52.8	37.2	45.8	36.6	43.4
Upgrading / replacing administrative IT / ERP systems	24.7	29.2	23.3	20.6	23.0	28.7
Upgrading / replacing emergency communications	16.1	13.9	14.0	18.7	11.0	23.3
Upgrading / enhancing network and data security	54.2	56.9	62.8	60.7	49.7	51.2
<i>scale score 6/7; scale: 1=not important; 7=very important</i>						
As of Fall 2012, will your campus have "preferred provider" agreements with technology companies that include online hardware and software resale programs linked to your campus web site?						
No	69.6	86.1	86.0	69.4	69.6	54.7
<i>Yes, hardware</i>						
Acer	0.2	-	-	-	0.5	-
Apple	55.9	79.2	81.4	56.5	56.5	32.8
Asus	0.2	-	-	-	0.5	-
Dell	54.6	79.2	67.4	58.3	49.7	40.6
Gateway	0.7	1.4	-	-	1.6	-
Hewlett Packard	24.7	45.8	32.6	25.0	15.7	23.4
Lenovo	16.8	22.2	41.9	11.1	16.2	10.9
Sony	1.7	5.6	-	3.7	-	0.8
Toshiba	1.3	2.8	2.3	-	1.6	0.8
<i>Yes, software</i>						
Adobe	53.0	73.6	69.8	47.2	52.4	41.4
Apple	47.0	68.1	60.5	51.9	47.1	26.6
Microsoft	69.6	87.5	81.4	68.5	70.2	55.5
Statistical software	43.4	83.3	74.4	42.6	45.5	7.8
Virus protection / spyware products	55.4	83.3	74.4	55.6	52.9	36.7
Has your institution established a specific single product standard for any of the following (i.e., your campus supports only one product)?						
<i>Desktop / notebook computer operating system</i>						
No	81.0	93.1	93.0	86.1	85.3	59.7
Macintosh	0.4	-	-	-	0.5	0.8
Windows 2000 / XP	1.3	-	-	3.7	0.5	1.6
Windows Vista	-	-	-	-	-	-
Windows System 7	17.1	5.6	7.0	10.2	13.6	38.0
Linux	0.2	1.4	-	-	-	-
<i>Desktop / notebook product</i>						
No	76.1	93.1	90.7	86.1	78.5	49.6
Acer	0.2	-	-	-	-	0.8
Apple	0.7	-	-	-	1.1	1.6
Asus	0.4	-	-	-	1.1	-
Dell	12.5	6.9	4.7	10.2	8.9	25.6
Hewlett Packard	5.3	-	-	2.8	4.7	13.2
Lenovo	3.9	-	2.3	0.9	5.2	7.0
Sony	-	-	-	-	-	-
Toshiba	0.2	-	-	-	0.5	-
Other	0.7	-	2.3	-	-	2.3
<i>percentages</i>						

CAMPUS COMPUTING 2012

The National Survey of Computing and Information Technology in American Higher Education

	All Institutions	Universities Public	Private	4-Year Colleges Public	Private	Community Colleges
Has your institution established a specific single product standard? (continued)						
<i>Course / learning management system</i>						
No	7.2	12.5	11.6	6.5	5.8	5.4
Blackboard (including Angel & WebCT)	44.8	52.8	62.8	48.2	39.3	39.5
CampusCruiser	0.2	-	-	-	-	0.8
Desire2Learn	11.4	6.9	2.3	19.4	2.1	24.0
eCollege	1.3	1.4	-	0.9	1.1	2.3
Epsilon	-	-	-	-	-	-
Instructure	4.6	9.7	2.3	0.9	3.1	7.8
Jenzabar	2.0	-	-	-	5.2	0.8
Moodle	20.1	5.6	9.3	16.7	34.6	13.2
Sakai	6.1	9.7	11.6	6.5	6.8	0.8
Other	2.4	1.4	-	0.9	2.1	5.4
<i>Lecture capture system</i>						
No	59.5	43.1	34.9	56.5	70.2	63.6
Accordant	1.1	1.4	2.3	0.9	1.1	0.8
Desire2Learn	0.4	1.4	-	-	-	0.8
Echo360	7.2	16.7	23.3	9.3	1.6	3.1
Kaltura	0.9	1.4	-	0.9	1.1	0.8
Matterhorn	0.4	1.4	-	0.9	-	-
Panopto	6.1	8.3	7.0	9.3	4.2	4.7
Sonic Foundry (Mediasite)	4.4	2.8	14.0	3.7	4.7	2.3
TechSmith (Camtasia)	6.1	4.2	4.7	6.5	6.3	7.0
Tegrity	7.7	13.9	9.3	8.3	4.7	7.8
Vbrick	0.4	-	2.3	-	-	0.8
Other	5.9	5.6	2.3	3.7	6.3	8.5
As of Fall 2012, has your institution activated mobile apps (or mobile interfaces) for campus resources and services?						
No	22.3	16.7	18.6	17.6	22.5	30.2
Yes	46.8	66.7	60.5	45.4	41.9	39.5
Planned for later this academic year (2012-13)	13.4	11.1	7.0	16.7	13.6	14.0
Currently under review	17.5	5.6	14.0	20.4	22.0	16.3
<i>Current / anticipated Mobile App Provider:</i>						
Blackboard	34.8	44.4	51.2	38.9	33.0	23.3
CampusCruiser	0.4	-	-	-	-	1.6
Campus Management	-	-	-	-	-	-
Desire2Learn	7.4	1.4	4.7	14.8	0.5	15.5
eCollege	0.7	-	-	-	1.0	1.6
Ellucian / Datatel (MOX)	8.3	1.4	7.0	3.7	9.9	14.0
Ellucian / SunGard Mobile Connection	8.1	8.3	2.3	9.3	6.8	10.9
Epsilon	-	-	-	-	-	-
Instructure	4.2	11.1	2.3	1.9	2.6	5.4
Jenzabar	4.2	-	-	-	9.4	3.9
Moodlerooms	4.8	2.8	2.3	4.6	7.9	2.3
rSmart	0.7	-	2.3	0.9	1.0	-
uMobile	0.6	2.8	-	-	0.5	-
Other	21.7	31.9	27.9	26.9	17.3	16.3
<i>percentages</i>						
USES OF INFORMATION TECHNOLOGY						
How strongly do you agree or strongly agree:*						
Faculty have unreasonable expectations about user support services	43.1	38.9	37.2	45.4	45.5	41.9
Technology has done much to improve instruction on my campus	93.9	90.3	93.0	95.4	92.1	97.7
We are experiencing major cost over-runs / unexpected costs in our ERP deployment activities	17.5	22.2	4.7	24.1	14.1	18.6
Cloud computing offers a viable strategy for key campus ERP applications	58.7	52.8	62.8	63.0	59.7	55.8
Cloud computing will play an increasingly important role in our campus ERP strategy	61.3	55.6	67.4	58.3	65.4	58.9
Cloud computing is an important part of our campus technology plan to reduce IT costs.	64.6	65.3	72.1	68.5	62.8	61.2
eBook content will be an important source for instructional resources in five years	90.6	94.4	90.7	93.5	89.5	87.6
eBook readers (hardware) will be important platforms for instructional content in five years	78.6	79.2	69.8	81.5	79.1	78.3
Lecture capture is an important part of our campus plan for developing and delivering instructional content	67.0	79.2	83.7	74.1	56.5	64.3
Mobile apps are an important part of our campus plan to enhance instructional resources and improve campus services	79.4	87.5	88.4	83.3	76.4	72.9
MOOCs offer a viable academic model for the effective delivery of online instruction	50.5	48.6	60.5	53.7	51.8	43.4
MOOCs offer a viable business model for campuses to accrue new revenues from online courses.	31.7	27.8	30.2	37.0	32.5	28.7
<i>percentages</i>						
CURRENT IT / COMPUTER FACILITIES AND RESOURCES						
Headcount enrollment on campus as of May 2012	11,173	26,920	10,808	10,558	3,700	14,088
Number of institution owned desktop or notebook computers and workstations						
Desktop / notebook computers	3,942	13,359	5,653	3,301	1,449	2,343
Unix Workstations	135	787	196	50	10	7
Proportion of individuals who own desktop or notebook computers						
<i>Students</i>						
Desktops	31.5	29.7	21.0	35.4	17.9	53.0
Notebooks	69.6	75.1	86.8	65.9	81.6	45.7
Smartphones	67.4	63.1	78.1	69.9	68.0	63.1
Tablets	21.1	23.7	24.0	21.9	19.6	20.1
<i>Faculty</i>						
Desktops	57.4	63.5	48.9	58.1	47.0	71.8
Notebooks	50.3	53.1	57.6	48.4	53.7	42.8
Smartphones	57.7	56.3	62.6	58.9	55.3	59.5
Tablets	21.7	23.6	23.6	22.4	21.2	20.1
Total number of desktop computer labs, clusters and classrooms as of May 2012	100	186.0	112.6	118.0	57.8	94.5
How many dedicated to departments or units? (percentage)	42	89.1	43.7	53.0	17.4	43.6
<i>percentages</i>						

CAMPUS COMPUTING 2012

The National Survey of Computing and Information Technology in American Higher Education

	All Institutions	Universities Public	Private	4-Year Colleges Public	Private	Community Colleges
Percentage of operating systems installed on institutionally-owned computers and servers						
<i>Computers / clients</i>						
Mac	17.8	20.4	21.7	17.5	22.5	8.3
Windows 2000 / XP	23.7	20.7	25.8	25.8	22.2	25.0
Windows Vista	3.3	5.5	5.0	4.0	2.2	2.5
Windows System 7	52.9	44.8	42.4	50.9	52.7	62.8
Unix	1.2	2.3	2.1	1.3	0.9	0.6
Linux	2.6	5.1	4.2	2.3	2.5	0.9
<i>Network servers</i>						
Mac	3.3	4.3	3.6	3.4	3.3	2.6
Windows	66.3	44.8	55.8	67.0	67.6	79.2
Solaris / Open Solaris	3.8	9.4	6.4	4.9	1.6	2.3
Unix (non-Solaris)	4.3	7.3	6.8	2.2	4.0	4.0
Linux	18.5	30.2	24.7	18.9	19.9	7.7
Novell	1.7	0.8	0.7	1.5	2.0	2.3
Total number (FTE) of IT help desk / technical support personnel	31.7	105.7	66.9	26.1	10.8	14.8
User Support Ratio (enrollment / FTE help desk personnel)	352.5	254.7	161.6	404.5	342.6	951.9
Percentage of faculty with individual / personal Web page	27.6	35.9	36.7	30.2	25.5	21.0
Percentage of your faculty have taught an online course (80 pct of content online) over the past two years:						
Full-time faculty	23.6	22.6	12.4	25.5	16.1	37.4
Part-time faculty	22.4	21.0	14.5	23.1	19.4	29.4
Percentage of classes that use:						
Computer-based classrooms / labs	41.5	36.9	31.7	43.5	40.5	47.2
Computer-based simulations / exercises	19.1	16.0	15.3	17.5	18.9	23.5
Web pages for class materials & resources	51.2	50.9	45.8	53.9	51.8	49.8
Wikis / blogs	10.4	12.7	9.6	9.4	12.5	7.2
Online video resources	23.5	18.2	18.3	22.3	26.6	24.7
Commercial courseware / instructional resources	32.4	30.1	27.7	32.4	33.1	34.4
Internet resources (from off-campus resources)	64.9	66.0	63.6	64.1	69.7	58.3
Course management tools for online course resources	58.7	60.2	62.6	57.5	62.6	51.8
"Clickers" / classroom response system	7.8	11.7	7.8	7.2	7.2	6.9
Anti-plagiarism software for written assignment	19.0	13.5	16.1	19.2	22.6	17.3
Podcasting	5.4	5.9	5.0	5.8	5.9	4.0
eBooks and electronic textbooks	6.8	6.3	5.7	8.6	6.5	6.2
Lecture capture	6.2	7.9	8.3	6.7	4.5	6.5
ACADEMIC & INSTRUCTIONAL COMPUTING POLICIES AND PROCEDURES & RESOURCES						
Does your campus / institution						
Have a policy or program for rewarding courseware development or providing incentives for faculty to develop instructional software / courseware	41.4	52.8	34.9	54.6	29.3	44.2
Have a technology resource center that focuses on the instructional use of information technology	79.0	91.7	86.0	84.3	72.3	75.2
Have a formal program to recognize and reward the use of information technology as part of the routine faculty review and promotion process	18.4	12.5	11.6	20.4	17.3	24.0
Have a formal program to assess the impact of IT on instruction and learning outcomes	22.7	22.2	32.6	25.9	17.8	24.0
Have a formal policy regarding ownership of Web-based curriculum resources and intellectual property developed by faculty	60.8	80.6	65.1	63.0	48.2	65.1
Charge students for access to digital content (online reserve readings, course packets, recorded content, etc.)	5.5	4.2	9.3	7.4	4.2	5.4
Recycle most (60 pct or more) of the institution's used / obsolete computers	91.7	87.5	95.3	89.8	95.3	89.1
Inform / counsel students about privacy issues related to social networking sites (Facebook, MySpace, etc.)	63.7	72.2	72.1	59.3	77.5	39.5
Maintain a campus page on Facebook	94.8	91.7	97.7	92.6	97.4	93.8
Have an institutional presence on YouTube	83.2	90.3	93.0	79.6	86.9	73.6
Have an institutional presence on iTunesU	56.7	76.4	86.0	58.3	51.8	41.9
Maintain a public campus Wiki	25.6	31.9	39.5	24.1	27.7	15.5
Maintain an institutional account on Twitter	85.5	91.7	83.7	84.3	89.5	77.5
Have a campus / department license for antiplagiarism software (e.g., Glatt, Plagiarism-Finder, Turnitin)	67.5	75.0	78.6	76.9	66.0	54.3
Encourage the use of the Creative Commons license on digital works	32.6	45.8	34.9	28.7	35.1	24.0
Does your institution have a strategic plan for:						
<i>Information technology?</i>						
no	5.3	8.3	9.3	3.7	5.8	3.1
currently preparing a plan	23.6	22.2	20.9	28.7	26.7	16.3
yes	71.1	69.4	69.8	67.6	67.5	80.6
<i>Instructional technology / instruction integration</i>						
no	19.7	19.4	25.6	17.6	20.9	17.8
currently preparing a plan	27.3	29.2	20.9	27.8	31.4	21.7
yes	53.0	51.4	53.5	54.6	47.6	60.5
<i>Deploying course / learning management tools?</i>						
no	19.3	12.5	16.3	18.5	18.9	25.6
currently preparing a plan	17.9	18.1	11.6	18.5	19.4	17.1
yes	62.8	69.4	72.1	63.0	61.8	57.4
<i>Online / distance education?</i>						
no	22.3	12.5	27.9	13.0	34.6	15.5
currently preparing a plan	26.3	33.3	20.9	30.6	27.8	18.6
yes	51.4	54.2	51.2	56.5	37.7	65.9
<i>Campus portal services?</i>						
no	26.7	23.6	23.3	27.8	26.7	28.7
currently preparing a plan	21.2	18.1	11.6	26.9	18.9	24.8
yes	52.1	58.3	65.1	45.4	54.5	46.5
<i>Wireless networks?</i>						
no	8.7	6.9	4.7	10.2	6.8	12.4
currently preparing a plan	9.6	8.3	-	12.0	9.4	11.6
yes	81.8	84.7	95.4	77.8	83.8	76.0
<i>percentages</i>						

CAMPUS COMPUTING 2012

The National Survey of Computing and Information Technology in American Higher Education

	All Institutions	Universities Public	Private	4-Year Colleges Public	Private	Community Colleges
Does your institution have a strategic plan for:						
<i>Network security</i>						
no	8.5	9.7	4.7	6.5	10.0	8.5
currently preparing a plan	17.1	13.9	7.0	21.3	20.4	14.0
yes	74.4	76.4	88.4	72.2	69.6	77.5
<i>IT disaster recovery</i>						
no	6.5	6.9	4.7	4.6	7.9	6.2
currently preparing a plan	32.0	27.8	14.0	26.9	36.7	38.0
yes	61.5	65.3	81.4	68.5	55.5	55.8
<i>Administrative systems / ERP upgrade / replacement</i>						
no	13.3	9.7	4.7	12.0	15.2	16.3
currently preparing a plan	14.7	12.5	16.3	13.0	15.2	16.3
yes	72.0	77.8	79.1	75.0	69.6	67.4
<i>Digital content management</i>						
no	37.8	30.6	14.0	33.3	40.8	48.8
currently preparing a plan	33.0	38.9	41.9	38.0	27.2	31.0
yes	29.3	30.6	44.2	28.7	31.9	20.2
<i>Data warehousing</i>						
no	29.7	15.3	14.0	22.2	36.7	38.8
currently preparing a plan	32.8	40.3	25.6	34.3	33.0	29.5
yes	37.6	44.4	60.5	43.5	30.4	31.8
<i>Business intelligence / analytics</i>						
no	35.4	20.8	14.0	34.3	39.8	45.0
currently preparing a plan	33.9	41.7	34.9	36.1	33.0	28.7
yes	30.8	37.5	51.2	29.6	27.2	26.4
<i>Open Source deployment and development</i>						
no	66.5	62.5	55.8	61.1	63.4	81.4
currently preparing a plan	14.7	18.1	16.3	17.6	14.1	10.9
yes	18.8	19.4	27.9	21.3	22.5	7.8
<i>Lecture capture / podcasting course lectures / resources</i>						
no	33.2	22.2	18.6	25.9	36.7	45.0
currently preparing a plan	35.5	33.3	34.9	37.0	37.7	32.6
yes	31.3	44.4	46.5	37.0	25.7	22.5
<i>Emergency communications / notification</i>						
no	6.1	5.6	4.7	4.6	6.3	7.8
currently preparing a plan	9.6	6.9	4.7	9.3	10.0	12.4
yes	84.4	87.5	90.7	86.1	83.8	79.8
<i>Digital preservation / data archiving</i>						
no	29.5	26.4	18.6	27.8	28.8	37.2
currently preparing a plan	39.0	44.4	41.9	45.4	34.0	37.2
yes	31.5	29.2	39.5	26.9	37.2	25.6
<i>Cellular phones / mobile devices</i>						
no	35.7	37.5	30.2	31.5	34.6	41.9
currently preparing a plan	23.2	29.2	25.6	24.1	20.4	22.5
yes	41.1	33.3	44.2	44.4	45.0	35.7
<i>Cloud computing</i>						
no	34.6	27.8	23.3	32.4	30.9	49.6
currently preparing a plan	41.8	50.0	48.8	39.8	44.0	33.3
yes	23.6	22.2	27.9	27.8	25.1	17.1
<i>Server virtualization</i>						
no	8.7	6.9	2.3	8.3	7.3	14.0
currently preparing a plan	14.7	9.7	9.3	13.9	15.7	18.6
yes	76.6	83.3	88.4	77.8	77.0	67.4
<i>508 accessibility / compliance for Web pages / resources</i>						
no	29.5	20.8	32.6	13.9	45.0	23.3
currently preparing a plan	29.8	33.3	39.5	26.9	29.3	27.9
yes	40.7	45.8	27.9	59.3	25.7	48.8
<i>Email and document archiving to address eDiscovery</i>						
no	33.0	31.9	27.9	22.2	39.8	34.1
currently preparing a plan	32.2	30.6	32.6	38.0	26.7	36.4
yes	34.8	37.5	39.5	39.8	33.5	29.5
<i>Identity and access management</i>						
no	20.3	12.5	11.6	9.3	30.9	20.9
currently preparing a plan	43.7	45.8	34.9	43.5	41.4	48.8
yes	36.1	41.7	53.5	47.2	27.8	30.2
<i>Digital textbooks / digital curricular materials</i>						
no	52.3	45.8	39.5	49.1	55.0	58.9
currently preparing a plan	39.2	47.2	51.2	38.9	36.7	34.9
yes	8.5	6.9	9.3	12.0	8.4	6.2
<i>Social media (Facebook, Twitter, etc.)</i>						
no	36.1	34.7	32.6	38.9	35.1	37.2
currently preparing a plan	34.3	31.9	44.2	36.1	34.0	31.0
yes	29.7	33.3	23.3	25.0	30.9	31.8
percentages						
When did your institution develop / last update the campus plan for the IT issues listed below?						
<i>Overall campus IT plan</i>						
past 12 months	54.1	54.2	60.5	50.0	51.3	59.4
13 to 24 months ago	16.2	15.3	16.3	16.7	16.8	15.6
more than 24 months ago	29.7	30.6	23.3	33.3	31.9	25.0
<i>IT security</i>						
past 12 months	61.8	72.2	65.1	64.8	57.6	58.6
13 to 24 months ago	17.9	11.1	18.6	17.6	18.9	20.3
more than 24 months ago	20.3	16.7	16.3	17.6	23.6	21.1
percentages						

CAMPUS COMPUTING 2012

The National Survey of Computing and Information Technology in American Higher Education

	All Institutions	Universities Public	Private	4-Year Colleges Public	Private	Community Colleges
When did your institution develop / last update the campus plan for the IT issues listed below?						
<i>IT disaster recovery</i>						
past 12 months	55.7	61.1	65.1	63.0	50.8	50.8
13 to 24 months ago	18.8	20.8	18.6	15.7	19.4	19.5
more than 24 months ago	25.5	18.1	16.3	21.3	29.8	29.7
<i>Cloud computing</i>						
past 12 months	61.6	61.1	66.7	62.0	68.1	50.0
13 to 24 months ago	13.5	15.3	19.1	16.7	8.4	15.6
more than 24 months ago	25.0	23.6	14.3	21.3	23.6	34.4
<i>Mobile Computing</i>						
past 12 months	66.7	68.1	73.8	70.4	67.5	59.4
13 to 24 months ago	11.5	15.3	16.7	7.4	8.4	15.6
more than 24 months ago	21.8	16.7	9.5	22.2	24.1	25.0
<i>Identity and access management</i>						
past 12 months	61.9	68.1	66.7	67.6	56.5	60.2
13 to 24 months ago	11.8	9.7	14.3	13.9	13.6	7.8
more than 24 months ago	26.3	22.2	19.1	18.5	29.8	32.0
<i>percentages</i>						
FUTURE ISSUES AFFECTING CAMPUS COMPUTING						
As you think about the future of computing and IT at your institution, please indicate how important you see the following issues in the overall the campus computing / information technology environment and in IT policy and planning over the next 2-3 years?						
<i>Hardware</i>						
Laptop / netbook computers	5.7	5.5	5.8	5.8	5.8	5.5
Smart phones	6.0	6.1	6.1	6.3	6.1	5.7
Tablet devices (iPads, etc.)	6.2	6.3	6.1	6.3	6.2	6.1
<i>Instructional applications and resources</i>						
Developing instructional software	4.0	4.0	4.5	4.4	3.8	3.7
Using instructional software in classes	6.0	5.9	6.0	6.0	6.0	6.0
Using instructional software as a supplement to classes	6.2	6.2	6.2	6.2	6.3	6.2
Web-based tutorials	5.7	5.5	5.5	5.9	5.6	5.9
e-Books (e-textbooks)	5.6	5.3	5.6	5.7	5.5	5.7
Open Source textbooks	4.6	4.5	4.5	4.9	4.6	4.4
Learning management systems	6.5	6.5	6.6	6.5	6.5	6.5
Online education	5.8	6.1	5.8	5.9	5.4	6.1
Online course evaluation	6.1	6.2	6.3	6.2	5.8	6.2
Classroom "clickers"	4.5	5.2	4.4	4.6	4.3	4.5
Student ePortfolios	4.7	4.7	4.8	4.9	4.9	4.3
<i>User support services / campus services</i>						
Online IT training	5.6	5.5	5.5	5.8	5.5	5.7
Online technical support	6.0	6.1	6.0	6.1	5.9	6.1
Computer resale program	2.7	2.8	2.8	2.8	2.6	2.7
Alumni e-mail accounts	4.2	4.5	4.7	4.2	4.4	3.4
Alumni services via the campus Web site	5.0	4.7	5.7	4.9	5.5	4.2
<i>Internet / Web issues & resources</i>						
Internet videoconferencing	6.0	6.2	6.2	6.1	5.8	6.0
Guest access on campus networks	5.1	5.2	5.0	5.2	5.1	5.0
SCORM standards	4.0	4.2	3.7	4.2	3.8	4.2
Data encryption	6.0	6.1	6.3	6.2	5.9	6.0
Content management systems	6.1	6.0	6.2	6.1	6.0	6.1
Wikis	4.5	4.9	4.5	4.5	4.5	4.3
Podcasting	4.7	4.7	4.7	4.7	4.8	4.5
Blogging	4.6	4.6	5.0	4.6	4.9	4.3
Web conferencing	5.8	6.0	5.9	5.8	5.8	5.9
Server virtualization	6.5	6.6	6.4	6.6	6.4	6.4
Desktop virtualization	5.7	5.8	5.6	6.0	5.5	5.8
Network virtualization	4.9	5.1	4.5	5.0	4.7	5.1
Mobile computing	6.2	6.2	6.1	6.3	6.2	6.0
<i>Vendor Services / Outsourcing</i>						
Data back-up or data storage	4.3	4.0	4.9	4.6	4.5	3.9
ERP services	3.3	2.9	3.5	3.4	3.1	3.5
Instructional technology services	3.1	2.8	2.9	3.1	3.0	3.4
User support	2.9	2.5	3.0	2.8	2.9	3.3
ResNet services	2.6	2.5	2.3	3.4	2.7	1.9
Network services	2.6	2.3	2.4	2.6	2.6	2.8
eProcurement	3.0	2.9	3.3	3.3	2.8	2.9
Student / Campus portal	3.0	2.3	3.1	3.1	2.9	3.2
Web hosting services	3.8	3.0	4.5	3.9	4.2	3.5
Video streaming	4.2	3.5	4.6	4.2	4.6	4.0
Student email services	5.8	5.8	6.1	5.9	5.8	5.7
Online course delivery	3.7	3.3	4.0	3.6	3.7	3.9
<i>mean scores; scale from 1="not important" to 7="very important".</i>						
RATING THE TECHNOLOGY INFRASTRUCTURE						
Computer networks and data communication	6.0	5.9	5.8	5.9	6.1	6.0
Telecommunications and phone system	5.5	5.5	5.3	5.4	5.5	5.7
Wireless networks	5.6	5.6	5.4	5.5	5.8	5.5
User support services	5.6	5.3	5.6	5.5	5.6	5.7
Online reference resources in campus library / library system	5.8	5.7	5.9	5.8	5.9	5.8
Research computing	3.8	4.7	4.6	3.7	3.5	3.4
Instructional computing	5.3	5.4	5.2	5.3	5.2	5.5
Enterprise systems	5.5	5.4	5.4	5.4	5.5	5.5
Web resources to support instruction	5.2	5.3	4.8	5.1	5.2	5.2
<i>mean scores; scale from 1="poor" to 7="excellent".</i>						

CAMPUS COMPUTING 2012

The National Survey of Computing and Information Technology in American Higher Education

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RATING THE TECHNOLOGY INFRASTRUCTURE (continued)						
Multimedia / AV enabled classrooms	5.6	5.5	5.4	5.4	5.6	5.8
Campus web site services / student portal	5.1	5.2	4.8	4.9	5.1	5.1
Overall assessment of IT security (network attacks, secure data bases, identity mgmt., etc.)	5.3	5.3	5.3	5.3	5.3	5.3
Disaster planning	4.5	4.4	4.7	4.5	4.5	4.4
IT training for faculty	4.6	4.6	4.7	4.5	4.7	4.5
IT training for students	3.8	3.8	3.7	3.7	3.8	3.7
Data warehousing	3.9	4.3	4.2	3.9	3.6	4.1
Digital dashboards / ERP analytics	3.4	3.5	3.5	3.4	3.3	3.5
Emergency communications / notification system(s)	5.5	5.8	5.7	5.4	5.6	5.2
Cellular coverage across the campus	5.1	5.0	5.1	5.0	5.5	4.8
Mobile apps / services for students, faculty & staff	3.6	4.0	4.0	3.8	3.6	3.0
<i>mean scores; scale from 1="poor" to 7="excellent"</i>						
Over the past two decades, colleges and universities have made significant investments in information technology to enhance instruction and scholarship and to improve services and administrative operations. How would you rate the effectiveness of institution's investment in technology resources and services on the following issues? percent reporting "very effective"						
Student recruitment	40.0	43.1	53.5	30.6	48.7	28.7
On-campus teaching and instruction	55.2	48.6	41.9	57.4	52.9	65.1
Online / distance courses and programs	41.6	54.2	16.3	39.8	27.7	65.1
Library resources and services	61.0	59.7	53.5	65.7	60.2	61.2
Academic support services	45.1	44.4	46.5	49.1	42.4	45.7
Student services	48.8	51.4	53.5	43.5	46.1	54.3
Research and scholarship	23.4	41.7	32.6	24.1	21.6	12.4
Data analysis and managerial analytics	22.7	18.1	27.9	18.5	21.6	28.7
Development efforts	30.1	26.4	30.2	22.2	36.3	29.5
Alumni activities / engagement	26.6	27.8	37.2	21.3	35.8	13.2
Administrative information systems and operations	61.5	52.8	55.8	60.2	63.4	66.7
<i>percentages for 6/7; scale score: 1=not effective; 7=very effective</i>						
ADDRESSING BUDGET ISSUES BY:						
<i>Charging fees to departments and service units (networking, printing, etc.)</i>						
Doing this already	26.2	61.1	37.2	22.2	18.3	17.8
Beginning in 2012-13	1.7	2.8	-	2.8	1.6	0.8
Reviewing for 2012-13	12.7	11.1	11.6	20.4	11.0	10.1
Decided not to do	59.5	25.0	51.2	54.6	69.1	71.3
<i>Requiring a computer / IT fee for all students</i>						
Doing this already	56.7	77.8	30.2	76.9	36.1	67.4
Beginning in 2012-13	1.1	-	-	-	2.1	1.6
Reviewing for 2012-13	3.9	2.8	4.7	7.4	3.1	2.3
Decided not to do	38.3	19.4	65.1	15.7	58.6	28.7
<i>Leasing rather than buying hardware</i>						
Doing this already	19.9	25.0	32.6	10.2	28.3	8.5
Beginning in 2012-13	1.8	-	-	1.9	3.1	1.6
Reviewing for 2012-13	12.7	15.3	9.3	16.7	10.5	12.4
Decided not to do	65.6	59.7	58.1	71.3	58.1	77.5
<i>Reducing hours in public access facilities</i>						
Doing this already	21.4	29.2	14.0	24.1	13.1	29.5
Beginning in 2012-13	3.0	-	-	1.9	5.2	3.1
Reviewing for 2012-13	7.4	9.7	11.6	11.1	3.1	7.8
Decided not to do	68.3	61.1	74.4	63.0	78.5	59.7
<i>Reducing services (e.g., less consulting, training)</i>						
Doing this already	27.1	31.9	14.0	31.5	21.5	33.3
Beginning in 2012-13	2.6	1.4	2.3	2.8	3.1	2.3
Reviewing for 2012-13	15.7	25.0	16.3	19.4	11.0	14.0
Decided not to do	54.7	41.7	67.4	46.3	64.4	50.4
<i>Phasing out public computer labs</i>						
Doing this already	10.2	18.1	11.9	13.9	7.9	5.4
Beginning in 2012-13	3.1	4.2	2.4	3.7	4.2	0.8
Reviewing for 2012-13	19.9	25.0	31.0	20.4	19.4	14.0
Decided not to do	66.8	52.8	54.8	62.0	68.6	79.8
<i>Reorganizing operations (e.g., combining IT units)</i>						
Doing this already	57.1	69.4	58.1	60.2	51.3	55.8
Beginning in 2012-13	7.7	8.3	4.7	10.2	7.9	6.2
Reviewing for 2012-13	15.8	19.4	18.6	14.8	16.2	13.2
Decided not to do	19.3	2.8	18.6	14.8	24.6	24.8
<i>Reducing staff</i>						
Doing this already	31.7	41.7	23.3	32.4	25.1	38.0
Beginning in 2012-13	3.9	1.4	2.3	3.7	4.7	4.7
Reviewing for 2012-13	7.0	15.3	2.3	8.3	5.8	4.7
Decided not to do	57.5	41.7	72.1	55.6	64.4	52.7
<i>Using information technology to reduce instructional costs</i>						
Doing this already	49.5	59.7	51.2	46.3	40.8	58.9
Beginning in 2012-13	3.3	1.4	4.7	1.9	3.7	4.7
Reviewing for 2012-13	22.3	23.6	11.6	34.3	19.9	18.6
Decided not to do	24.9	15.3	32.6	17.6	35.6	17.8
<i>Making greater use of student assistants for user support needs</i>						
Doing this already	78.8	86.1	81.4	83.3	83.3	63.6
Beginning in 2012-13	2.2	2.8	-	0.9	2.1	3.9
Reviewing for 2012-13	6.8	2.8	9.3	6.5	4.7	11.6
Decided not to do	12.2	8.3	9.3	9.3	10.0	20.9
<i>percentages</i>						

CAMPUS COMPUTING 2012

The National Survey of Computing and Information Technology in American Higher Education

	All Institutions	Universities Public	Private	4-Year Colleges Public	Private	Community Colleges
ADDRESSING BUDGET ISSUES BY (continued)						
<i>Outsourcing computing / IT services</i>						
Doing this already	28.4	27.8	41.9	25.0	28.8	26.4
Beginning in 2012-13	3.0	6.9	4.7	4.6	2.1	-
Reviewing for 2012-13	15.1	20.8	16.3	15.7	11.5	16.3
Decided not to do	53.6	44.4	37.2	54.6	57.6	57.4
<i>Outsourcing student portal service</i>						
Doing this already	9.0	8.3	9.3	13.0	8.4	7.0
Beginning in 2012-13	1.7	1.4	-	2.8	1.6	1.6
Reviewing for 2012-13	8.3	9.7	18.6	8.3	6.3	7.0
Decided not to do	81.0	80.6	72.1	75.9	83.8	84.5
<i>Outsourcing user support / help desk services</i>						
Doing this already	13.4	12.5	18.6	9.3	11.5	18.6
Beginning in 2012-13	0.4	-	-	0.9	0.5	-
Reviewing for 2012-13	10.5	8.3	16.3	9.3	11.0	10.1
Decided not to do	75.7	79.2	65.1	80.6	77.0	71.3
<i>Outsourcing ERP services</i>						
Doing this already	13.1	11.1	11.6	20.4	10.0	13.2
Beginning in 2012-13	1.3	-	2.3	2.8	1.6	-
Reviewing for 2012-13	9.6	15.3	11.6	8.3	11.0	4.7
Decided not to do	76.1	73.6	74.4	68.5	77.5	82.2
<i>Outsourcing ResNet services</i>						
Doing this already	8.1	8.3	4.8	14.8	8.4	3.1
Beginning in 2012-13	0.7	-	-	0.9	1.1	0.8
Reviewing for 2012-13	6.6	4.2	11.9	7.4	6.8	5.4
Decided not to do	84.5	87.5	83.3	76.9	83.8	90.7
<i>Outsourcing student email services</i>						
Doing this already	63.0	70.8	65.1	60.2	58.1	67.4
Beginning in 2012-13	7.0	9.7	9.3	6.5	7.9	3.9
Reviewing for 2012-13	12.3	8.3	18.6	14.8	15.2	6.2
Decided not to do	17.7	11.1	7.0	18.5	18.9	22.5
<i>Delaying / deferring ERP deployment / replacement / upgrades</i>						
Doing this already	14.9	16.7	23.3	13.0	12.0	17.1
Beginning in 2012-13	1.3	2.8	2.3	0.9	1.1	0.8
Reviewing for 2012-13	9.9	12.5	14.0	7.4	8.9	10.9
Decided not to do	73.9	68.1	60.5	78.7	78.0	71.3
<i>Deferring / reducing use of consultants on IT projects</i>						
Doing this already	44.8	36.1	46.5	49.1	45.6	44.2
Beginning in 2012-13	2.6	1.4	4.7	0.9	4.2	1.6
Reviewing for 2012-13	12.5	15.3	18.6	13.9	11.0	10.1
Decided not to do	40.2	47.2	30.2	36.1	39.3	44.2
<i>Reviewing options for the campus standard Learning Management System</i>						
Doing this already	41.6	45.8	27.9	38.0	42.4	45.7
Beginning in 2012-13	4.6	4.2	9.3	4.6	4.7	3.1
Reviewing for 2012-13	21.9	25.0	30.2	20.4	20.4	20.9
Decided not to do	31.9	25.0	32.6	37.0	32.5	30.2
<i>Migrating to Software as a Service (SaaS) / ERP applications</i>						
Doing this already	15.9	22.2	19.1	19.4	12.0	14.0
Beginning in 2012-13	3.0	2.8	4.8	2.8	2.1	3.9
Reviewing for 2012-13	24.5	29.2	35.7	25.9	24.1	17.8
Decided not to do	56.6	45.8	40.5	51.9	61.8	64.3
<i>Migrating to Open Source ERP software and services</i>						
Doing this already	4.8	6.9	7.0	3.7	3.1	6.2
Beginning in 2012-13	0.2	-	-	-	-	0.8
Reviewing for 2012-13	8.5	12.5	7.0	9.3	8.9	5.4
Decided not to do	86.6	80.6	86.1	87.0	88.0	87.6
<i>Migrating to Open Source Learning management systems</i>						
Doing this already	31.3	23.6	23.3	25.0	45.6	22.5
Beginning in 2012-13	2.2	-	4.7	1.9	3.1	1.6
Reviewing for 2012-13	18.4	20.8	25.6	20.4	15.2	17.8
Decided not to do	48.1	55.6	46.5	52.8	36.1	58.1
<i>Migrating to Open Source Digital content for the library, curriculum, etc.</i>						
Doing this already	23.6	22.2	27.9	26.9	25.7	17.1
Beginning in 2012-13	3.7	4.2	2.3	3.7	5.2	1.6
Reviewing for 2012-13	23.8	31.9	30.2	25.0	23.0	17.1
Decided not to do	49.0	41.7	39.5	44.4	46.1	64.3
<i>Migrating to Open Source Desktop application software</i>						
Doing this already	10.9	4.2	9.3	10.2	12.0	14.0
Beginning in 2012-13	0.6	-	-	-	1.1	0.8
Reviewing for 2012-13	18.8	31.9	9.3	25.0	17.3	11.6
Decided not to do	69.8	63.9	81.4	64.8	69.6	73.6
<i>percentages</i>						
STRATEGIC, BUDGET AND PERSONNEL ISSUES						
Assessing the benefits of existing investments in computing and technology resources	6.1	5.9	6.4	6.2	5.9	6.1
Clarifying goals and campus plans for technology resources	6.4	6.4	6.5	6.4	6.4	6.5
Providing incentives and rewards for faculty to support technology integration into the curriculum	4.6	4.8	4.6	4.9	4.6	4.4
Faculty concerns about the benefits of computing in the curriculum	4.8	4.8	5.0	5.0	4.8	4.6
Administrative concerns about the benefits of computing in the curriculum	4.6	4.4	4.8	4.8	4.5	4.6
Establishing / maintaining campus-wide standards for hardware	5.5	4.8	5.6	5.7	5.4	6.0
Establishing / maintaining campus-wide standards for software	5.8	5.1	6.0	5.9	5.8	6.0
Using technology resources to enhance our distance / online education program	5.7	6.1	5.9	6.2	5.0	6.2
Negotiating site licensing agreements with textbook publishers	4.5	4.3	4.5	4.8	4.4	4.8
Negotiating site licensing agreements with academic publishers	4.6	4.4	4.7	4.8	4.5	4.8
<i>mean scores; scale from 1="poor" to 7="excellent"</i>						

CAMPUS COMPUTING 2012

The National Survey of Computing and Information Technology in American Higher Education

	All Institutions	Universities Public	Private	4-Year Colleges Public	Private	Community Colleges
STRATEGIC, BUDGET AND PERSONNEL ISSUES (continued)						
Sharing digital resources with other campuses / institutions	5.0	5.2	5.1	5.4	4.8	4.9
Developing / updating campus policies for Web-based intellectual property	5.1	5.0	5.6	5.3	5.2	4.9
Helping our IT personnel stay current with new technologies	6.4	6.2	6.4	6.5	6.4	6.4
Retaining current IT personnel given off-campus competition	6.1	6.1	6.0	6.2	6.1	5.9
Moving more of our user support services to the Web	5.8	5.7	5.9	6.0	5.7	5.8
Surveying students and faculty about IT issues and services	5.8	5.7	5.7	5.9	5.9	5.7
Assessing the return on investment for IT spending / resources	5.7	5.6	5.6	5.9	5.6	5.9
Researching the total cost of ownership (TCO) for our IT purchases	5.5	5.4	5.2	5.5	5.4	5.7
Migrating administrative / ERP services to the Cloud	3.4	3.5	3.7	3.4	3.4	3.5
Migrating instructional computing resources to the Cloud	4.3	4.1	4.5	4.5	4.3	4.2
Using Open Source tools and applications	4.4	4.5	4.5	4.7	4.6	4.0
Supporting smart phones	5.5	5.6	5.6	5.6	5.5	5.3
Managing / distributing digital learning resources	5.3	5.5	5.6	5.6	5.3	5.1
Controlling / restricting file sharing of commercial content (music, media, etc.)	5.2	4.8	5.4	5.4	5.1	5.1
Data warehousing	5.5	5.7	5.9	5.8	5.2	5.4
Storage management	5.9	6.3	6.0	6.0	5.9	5.8
Server consolidation	5.9	6.2	5.9	6.0	5.8	5.9
IT business continuity	6.1	6.1	6.3	6.2	5.9	6.0
Identity Management	6.1	6.4	6.2	6.3	5.8	6.0
Business analytics / intelligence	5.7	5.9	5.9	5.9	5.5	5.5
Environmental ("green") issues in the acquisition and disposal of IT hardware	5.2	5.2	5.2	5.2	5.1	5.4
Hosted applications / Software as a Service (SaaS)	4.9	5.2	5.2	4.9	4.8	4.8
Providing mobile services (apps) for our ERP / administrative systems	5.0	4.9	5.1	5.1	5.1	4.9
Providing mobile services (apps) for our LMS / learning management system	5.6	5.7	5.8	5.8	5.6	5.4
Implementing Federated Identity Management	5.1	5.7	5.4	5.5	4.7	5.0
<i>mean scores: scale: 1=not important to 7=very important</i>						
THIS YEAR'S COMPUTING BUDGET COMPARED TO LAST YEAR'S BUDGET						
<i>Total computing budget for central IT services</i>						
Reduced >5%	9.6	7.0	-	14.8	8.9	10.9
Reduced 3-5%	6.5	9.9	7.0	10.2	2.1	7.8
Reduced 1-3%	10.9	15.5	9.3	9.3	7.3	15.5
No change	40.4	45.1	48.8	37.0	40.3	38.0
Increased 1-3%	23.3	18.3	27.9	19.4	29.3	18.6
Increased 3-5%	4.6	4.2	7.0	4.6	4.7	3.9
Increased >5%	4.8	-	-	4.6	7.3	5.4
<i>Computer purchases by academic departments</i>						
Reduced >5%	8.9	8.5	-	13.0	6.3	12.4
Reduced 3-5%	4.8	7.0	2.3	7.4	2.1	6.2
Reduced 1-3%	10.9	7.0	16.3	15.7	8.9	10.1
No change	62.6	70.4	69.8	52.8	66.5	58.1
Increased 1-3%	9.8	7.0	9.3	7.4	12.6	9.3
Increased 3-5%	1.1	-	2.3	1.9	0.5	1.6
Increased >5%	2.0	-	-	1.9	3.1	2.3
<i>All institutional purchases of desktop / notebook computers</i>						
Reduced >5%	8.9	5.6	-	9.3	8.4	14.0
Reduced 3-5%	5.5	8.5	4.7	10.2	1.1	7.0
Reduced 1-3%	12.6	15.5	18.6	14.8	10.5	10.1
No change	53.0	59.2	55.8	49.1	54.5	49.6
Increased 1-3%	14.8	9.9	18.6	9.3	19.9	13.2
Increased 3-5%	2.2	1.4	2.3	2.8	2.1	2.3
Increased >5%	3.1	-	-	4.6	3.7	3.9
<i>Institutional support for public computer labs</i>						
Reduced >5%	6.3	4.2	-	10.2	3.7	10.1
Reduced 3-5%	3.9	7.0	7.0	4.6	2.1	3.1
Reduced 1-3%	11.3	18.3	14.0	13.0	10.5	6.2
No change	67.5	66.2	72.1	56.5	72.8	68.2
Increased 1-3%	8.3	1.4	7.0	13.0	7.9	9.3
Increased 3-5%	1.5	1.4	-	0.9	2.6	0.8
Increased >5%	1.3	1.4	-	1.9	0.5	2.3
<i>Network servers</i>						
Reduced >5%	4.4	2.8	-	7.4	2.6	7.0
Reduced 3-5%	3.5	5.6	7.0	4.6	2.1	2.3
Reduced 1-3%	8.1	8.5	7.0	11.1	8.4	5.4
No change	57.8	57.8	69.8	50.9	57.1	60.5
Increased 1-3%	18.8	16.9	14.0	19.4	21.5	17.1
Increased 3-5%	4.8	4.2	2.3	4.6	7.3	2.3
Increased >5%	2.6	4.2	-	1.9	1.1	5.4
<i>Server software and related products</i>						
Reduced >5%	3.1	-	-	5.6	2.6	4.7
Reduced 3-5%	3.9	4.2	9.3	4.6	2.6	3.1
Reduced 1-3%	7.2	9.9	9.3	9.3	6.8	3.9
No change	59.6	56.3	65.1	56.5	60.7	60.5
Increased 1-3%	18.1	22.5	2.3	20.4	21.5	14.0
Increased 3-5%	5.9	2.8	14.0	2.8	4.7	9.3
Increased >5%	2.2	4.2	-	0.9	1.1	4.7
<i>Wireless networks</i>						
Reduced >5%	2.4	-	-	3.7	3.1	2.3
Reduced 3-5%	2.2	2.8	-	2.8	1.6	3.1
Reduced 1-3%	3.5	2.8	4.7	5.6	2.1	3.9
No change	44.8	42.3	39.5	43.5	44.5	49.6
Increased 1-3%	26.4	31.0	34.9	25.0	25.1	24.0
Increased 3-5%	9.4	9.9	11.6	7.4	12.6	5.4
Increased >5%	11.3	11.3	9.3	12.0	11.0	11.6

percentages

CAMPUS COMPUTING 2012

The National Survey of Computing and Information Technology in American Higher Education

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THIS YEAR'S COMPUTING BUDGET COMPARED TO LAST YEAR'S BUDGET (continued)						
<i>User training and support</i>						
Reduced >5%	4.6	2.8	-	8.3	3.1	6.2
Reduced 3-5%	3.0	5.6	2.3	4.6	2.1	1.6
Reduced 1-3%	8.9	12.7	11.6	9.3	6.3	9.3
No change	69.7	76.1	74.4	68.5	71.2	63.6
Increased 1-3%	11.1	2.8	7.0	8.3	13.1	16.3
Increased 3-5%	1.7	-	2.3	-	3.1	1.6
Increased >5%	1.1	-	2.3	0.9	1.1	1.6
<i>Professional development for IT personnel</i>						
Reduced >5%	6.5	1.4	4.7	10.2	5.8	7.8
Reduced 3-5%	4.8	9.9	4.7	8.3	1.6	3.9
Reduced 1-3%	12.9	15.5	18.6	10.2	12.6	12.4
No change	60.0	60.6	53.5	53.7	64.9	59.7
Increased 1-3%	12.9	9.9	16.3	15.7	12.0	12.4
Increased 3-5%	1.5	1.4	2.3	-	2.1	1.6
Increased >5%	1.5	1.4	-	1.9	1.1	2.3
<i>Campus portal services</i>						
Reduced >5%	2.4	2.8	2.3	3.7	2.1	1.6
Reduced 3-5%	1.7	4.2	-	1.9	1.1	1.6
Reduced 1-3%	4.4	8.5	9.3	1.9	3.7	3.9
No change	72.1	69.0	67.4	75.0	75.4	68.2
Increased 1-3%	11.8	12.7	14.0	10.2	10.0	14.7
Increased 3-5%	3.7	1.4	2.3	4.6	3.1	5.4
Increased >5%	3.9	1.4	4.7	2.8	4.7	4.7
<i>ERP software and services</i>						
Reduced >5%	1.3	-	-	1.9	1.1	2.3
Reduced 3-5%	1.1	2.8	-	1.9	0.5	0.8
Reduced 1-3%	3.3	4.2	4.7	2.8	3.1	3.1
No change	57.0	56.3	44.2	67.6	53.4	58.1
Increased 1-3%	21.6	23.9	32.6	14.8	20.9	23.3
Increased 3-5%	8.3	7.0	14.0	5.6	11.0	5.4
Increased >5%	7.4	5.6	4.7	5.6	10.0	7.0
<i>Cloud computing resources / services / migration</i>						
Reduced >5%	1.5	-	-	0.9	1.6	3.1
Reduced 3-5%	1.3	2.8	-	-	1.6	1.6
Reduced 1-3%	2.8	-	-	2.8	3.7	3.9
No change	63.3	59.2	58.1	63.9	63.9	65.9
Increased 1-3%	21.6	29.6	25.6	23.2	18.3	19.4
Increased 3-5%	6.3	8.5	14.0	3.7	6.8	3.9
Increased >5%	3.3	-	2.3	5.6	4.2	2.3
<i>Mobile computing resources / services</i>						
Reduced >5%	1.9	2.8	-	2.8	1.1	2.3
Reduced 3-5%	0.9	1.4	-	-	0.5	2.3
Reduced 1-3%	2.4	-	-	1.9	4.2	2.3
No change	58.1	53.5	55.8	57.4	61.3	57.4
Increased 1-3%	25.7	28.2	18.6	28.7	25.1	24.8
Increased 3-5%	7.6	11.3	23.3	7.4	3.7	6.2
Increased >5%	3.5	2.8	2.3	1.9	4.2	4.7
<i>External service providers</i>						
Reduced >5%	4.4	2.8	-	7.4	3.1	6.2
Reduced 3-5%	2.6	5.6	4.7	1.9	2.1	1.6
Reduced 1-3%	8.9	8.5	9.3	7.4	10.5	7.8
No change	65.5	64.8	65.1	68.5	62.8	67.4
Increased 1-3%	13.1	15.5	14.0	8.3	14.7	13.2
Increased 3-5%	3.7	1.4	7.0	2.8	4.7	3.1
Increased >5%	1.9	1.4	-	3.7	2.1	0.8
<i>Security issues</i>						
Reduced >5%	1.5	-	-	1.9	1.1	3.1
Reduced 3-5%	1.3	1.4	-	2.8	-	2.3
Reduced 1-3%	2.6	1.4	2.3	1.9	3.1	3.1
No change	57.2	54.9	48.8	50.0	60.2	62.8
Increased 1-3%	26.0	25.4	32.6	32.4	26.2	18.6
Increased 3-5%	6.8	9.9	4.7	7.4	5.8	7.0
Increased >5%	4.6	7.0	11.6	3.7	3.7	3.1
<i>Identity management</i>						
Reduced >5%	1.9	1.4	-	1.9	1.1	3.9
Reduced 3-5%	1.1	1.4	-	0.9	0.5	2.3
Reduced 1-3%	3.1	2.8	2.3	-	4.7	3.9
No change	65.7	54.9	55.8	57.4	76.4	65.9
Increased 1-3%	19.2	25.4	23.3	25.9	13.6	17.1
Increased 3-5%	4.8	5.6	7.0	9.3	2.1	3.9
Increased >5%	4.2	8.5	11.6	4.6	1.6	3.1
<i>Consultants for IT projects and services</i>						
Reduced >5%	8.5	8.5	7.0	9.3	8.4	8.5
Reduced 3-5%	5.4	7.0	7.0	6.5	4.2	4.7
Reduced 1-3%	10.2	11.3	11.6	11.1	10.5	7.8
No change	52.8	46.5	48.8	55.6	52.9	55.0
Increased 1-3%	15.1	15.5	16.3	7.4	16.2	19.4
Increased 3-5%	3.5	2.8	7.0	3.7	3.1	3.1
Increased >5%	4.6	8.5	2.3	6.5	4.7	1.6
percentages						

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The National Survey of Computing and Information Technology in American Higher Education

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THIS YEAR'S COMPUTING BUDGET COMPARED TO LAST YEAR'S (continued)						
<i>Data warehousing</i>						
Reduced >5%	2.0	1.4	-	2.8	2.1	2.3
Reduced 3-5%	2.0	2.8	2.3	-	1.6	3.9
Reduced 1-3%	3.1	2.8	4.7	1.9	3.1	3.9
No change	71.0	64.8	51.2	70.4	79.1	69.8
Increased 1-3%	15.3	22.5	30.2	13.0	10.5	15.5
Increased 3-5%	3.9	4.2	11.6	4.6	2.1	3.1
Increased >5%	2.6	1.4	-	7.4	1.6	1.6
<i>CRM services / software</i>						
Reduced >5%	2.2	1.4	-	2.8	2.1	3.1
Reduced 3-5%	1.7	1.4	4.7	1.9	0.5	2.3
Reduced 1-3%	4.6	8.5	11.6	2.8	4.2	2.3
No change	72.7	64.8	55.8	69.4	79.6	75.2
Increased 1-3%	11.4	7.0	18.6	15.7	10.0	10.1
Increased 3-5%	3.5	9.9	4.7	2.8	1.6	3.1
Increased >5%	3.9	7.0	4.7	4.6	2.1	3.9
<i>Supporting Open Source projects / applications</i>						
Reduced >5%	3.0	4.2	2.3	3.7	1.1	4.7
Reduced 3-5%	2.6	1.4	2.3	1.9	1.6	5.4
Reduced 1-3%	4.4	2.8	7.0	3.7	5.2	3.9
No change	78.2	73.2	72.1	76.9	80.6	80.6
Increased 1-3%	9.8	14.1	11.6	13.0	10.0	3.9
Increased 3-5%	1.5	2.8	2.3	0.9	1.1	1.6
Increased >5%	0.6	1.4	2.3	-	0.5	-
<i>Business Continuity</i>						
Reduced >5%	1.9	1.4	-	1.9	1.6	3.1
Reduced 3-5%	0.9	-	-	1.9	-	2.3
Reduced 1-3%	3.0	4.2	7.0	1.9	2.1	3.1
No change	71.6	63.4	58.1	75.0	77.5	69.0
Increased 1-3%	16.2	19.7	20.9	14.8	15.2	15.5
Increased 3-5%	4.4	8.5	7.0	3.7	2.1	5.4
Increased >5%	2.0	2.8	7.0	0.9	1.6	1.6
<i>Business analytics / Business Intelligence products</i>						
Reduced >5%	1.9	1.4	-	1.9	1.1	3.9
Reduced 3-5%	0.9	-	-	0.9	-	3.1
Reduced 1-3%	3.5	4.2	4.7	0.9	2.6	6.2
No change	62.9	54.9	48.8	59.3	72.8	60.5
Increased 1-3%	18.5	23.9	30.2	22.2	12.0	17.8
Increased 3-5%	6.1	9.9	9.3	3.7	6.8	3.9
Increased >5%	6.3	5.6	7.0	11.1	4.7	4.7
<i>Emergency communication / notification services</i>						
Reduced >5%	0.9	1.4	-	0.9	1.1	0.8
Reduced 3-5%	0.9	-	-	1.9	-	2.3
Reduced 1-3%	3.1	4.2	4.7	0.9	3.1	3.9
No change	75.5	77.5	76.7	71.3	81.7	68.2
Increased 1-3%	13.8	12.7	14.0	18.5	9.4	17.1
Increased 3-5%	3.7	4.2	2.3	2.8	3.7	4.7
Increased >5%	2.0	-	2.3	3.7	1.1	3.1
<i>percentages</i>						
THE TECHNOLOGY BUDGET						
Percentage of campuses experiencing a mid-year cut in the computing budget cut, 2011-12	15.8	19.4	14.0	14.8	14.1	17.8
Percentage of budget that was cut	2.0	1.7	1.0	1.5	1.9	3.2
Average central IT services budget for 2012-13	\$ 7,736,588	\$ 23,888,466	\$ 15,044,444	\$ 6,072,643	\$ 3,550,613	\$ 3,846,389
Percent of budget allocated to:						
Hardware	17.6	12.0	15.6	16.4	19.9	19.2
Software	14.3	10.9	13.1	13.0	15.9	15.2
Personnel	51.6	55.8	55.1	55.9	46.4	52.1
Content licenses	5.9	3.8	4.6	5.0	7.0	6.5
User support	14.0	14.9	11.9	14.6	13.6	14.1
Network service / support	13.3	14.8	11.6	12.8	14.5	11.9
<i>Note: numbers may not equal 100% because of overlapping budget categories</i>						
Central IT services as an estimated percentage of total institutional computing / IT expenditures	63.4	47.3	55.3	62.5	72.7	62.0
Total institutional computing / IT expenditures as an estimated percentage of the total institutional	6.5	4.5	4.7	6.8	6.2	8.6
Average annual expenditures for software licensing and maintenance fees paid to vendors for software and services for the following ERP, administrative, and instructional applications systems for 2012-13						
Finance / Accounting	\$ 142,826	\$ 489,639	\$ 264,972	\$ 104,086	\$ 47,329	\$ 77,291
Student information system	\$ 189,396	\$ 525,397	\$ 240,697	\$ 178,667	\$ 76,599	\$ 149,301
Human resources (recruitment)	\$ 46,566	\$ 128,374	\$ 34,527	\$ 47,349	\$ 19,971	\$ 42,853
Human resources (HR records and payroll)	\$ 120,315	\$ 382,594	\$ 218,630	\$ 68,719	\$ 36,292	\$ 87,369
Learning management systems	\$ 123,586	\$ 274,846	\$ 133,486	\$ 113,341	\$ 69,305	\$ 114,629
Alumni / Advancement / Development	\$ 45,949	\$ 114,969	\$ 110,955	\$ 28,124	\$ 33,741	\$ 21,767
CRM	\$ 53,228	\$ 134,690	\$ 43,039	\$ 42,878	\$ 44,391	\$ 33,499
Library system management	\$ 70,966	\$ 136,226	\$ 111,148	\$ 65,069	\$ 71,055	\$ 36,140
Current replacement cycle for desktop / notebook computers (years)						
Student labs						
1 year	-	-	-	-	-	-
2 years	3.3	1.4	7.0	0.9	5.2	2.3
3 years	31.7	34.7	39.5	29.6	35.1	24.0
4 years	45.7	47.2	51.2	42.6	46.1	45.0
5 years	19.3	16.7	2.3	26.9	13.6	28.7
<i>percentages</i>						

CAMPUS COMPUTING 2012

The National Survey of Computing and Information Technology in American Higher Education

	All Institutions	Universities Public	Private	4-Year Colleges Public	Private	Community Colleges
Current replacement cycle for desktop / notebook computers (years)						
<i>Faculty offices</i>						
1 year	-	-	-	-	-	-
2 years	0.9	-	2.3	0.9	1.1	0.8
3 years	19.0	25.0	30.2	17.6	20.9	10.1
4 years	56.0	52.8	58.1	46.3	63.4	54.3
5 years	24.1	22.2	9.3	35.2	14.7	34.9
<i>Administrative offices</i>						
1 year	-	-	-	-	-	-
2 years	0.6	1.4	-	-	0.5	0.8
3 years	13.8	18.1	16.3	11.1	15.7	10.1
4 years	56.7	61.1	69.8	50.0	60.7	49.6
5 years	28.9	19.4	14.0	38.9	23.0	39.5
<i>percentages</i>						
Does your institution have a financial plan to upgrade / enhance / replace the campus network (including wireless network?)						
No current plan / policy	9.6	11.1	7.0	12.0	7.9	10.1
Under discussion / development	24.5	20.8	14.0	34.3	22.5	24.8
Currently funded network replacement / upgrade plan	65.9	68.1	79.1	53.7	69.6	65.1
As of September 2012, will your institution have an operational campus-wide (emergency) notification system?						
No	1.8	-	-	2.8	2.1	2.3
If yes, indicate elements of the notification system that are functional as of September 2011:						
Sirens	41.4	59.7	48.8	52.8	32.5	32.6
PA system	47.5	52.8	60.5	54.6	32.5	56.6
Electronic signs / displays	47.1	52.8	46.5	55.6	35.1	55.0
Notice on campus web site / portal	85.6	90.3	90.7	87.0	81.7	86.0
Email	95.4	100.0	100.0	95.4	94.8	92.2
SMS / text messaging	94.8	98.6	97.7	95.4	96.9	88.4
RSS	23.8	33.3	34.9	24.1	21.5	17.8
Twitter	29.8	38.9	30.2	30.6	23.6	33.3
Voice mail to campus phones (offices / dorms)	75.0	69.4	90.7	85.2	74.9	64.3
Voice mail to off-campus land lines (homes / apartments)	55.4	62.5	72.1	66.7	54.5	38.0
Voice mail to mobile phones	63.9	69.4	81.4	76.9	65.4	41.9
Campus policy for emergency notification services assumes an "opt in" default for students (i.e., user must register)	63.3	65.3	52.4	65.7	58.4	71.0
As of September 2012, will your institution use a third party provider for notification software or services?						
No	10.5	6.9	7.0	10.2	5.8	20.9
If yes, indicate the name of the company that your campus uses for notification services:						
Blackboard Connect	28.3	27.9	35.0	32.3	33.3	13.5
CampusCruiser	0.2	-	-	-	-	1.0
E2Campus	17.1	8.8	12.5	13.1	22.8	18.3
3n / Everbridge	4.9	10.3	10.0	3.0	5.6	-
MIR3	2.0	4.4	5.0	2.0	0.6	1.9
Rave	19.1	23.5	22.5	18.2	17.8	18.3
SchoolMessenger	1.4	-	-	2.0	0.6	3.9
Send Word Now	2.4	2.9	5.0	2.0	2.8	1.0
Swiftreach Networks	0.2	-	2.5	-	-	-
Other	24.2	22.1	7.5	27.3	16.7	42.3
Over the past year (2011-12), how did you use your notification service?						
Emergency notification	89.7	93.1	81.4	93.5	89.0	88.4
Student recruitment (contacting prospective students)	2.9	5.6	-	0.9	1.6	6.2
Student services (academic services for current students)	7.0	8.3	-	6.5	4.7	12.4
Alumni contact / services	1.5	4.2	-	0.9	1.0	1.6
Severe weather alerts	63.7	72.2	65.1	61.1	66.5	56.6
<i>percentages</i>						
WEB AND NETWORKING ISSUES						
How important are the following issues on your campus?*						
Supporting instructional labs and clusters	5.9	5.6	5.5	6.0	5.6	6.4
Addressing the rapidly growing demand for network bandwidth	6.2	6.2	6.1	6.2	6.2	6.1
Digital image libraries / archives	4.9	5.1	5.1	4.9	4.9	4.6
Video / rich media streaming	5.5	5.5	5.8	5.7	5.6	5.3
Disaster recovery	6.0	6.0	6.3	6.1	5.9	5.9
Virtual private networks (VPN)	5.4	5.6	5.7	5.3	5.3	5.3
Network security	6.5	6.5	6.7	6.7	6.4	6.5
10Gb ethernet	5.3	5.9	5.4	5.5	5.2	5.1
Grid computing	3.0	4.5	3.7	3.0	2.7	2.5
Cloud computing	5.0	5.3	5.3	5.3	5.1	4.5
Making campus networks accessible to Smart Phones	5.2	5.4	5.3	5.4	5.3	4.6
Quality of cellular coverage that commercial services provide for your campus	4.6	5.1	5.3	4.7	4.6	4.1
Guest access / services on the campus network	5.0	5.0	5.2	5.2	5.1	4.8
Data Encryption	5.6	5.7	5.9	5.8	5.5	5.5
Replacement cycle for network infrastructure	5.9	6.1	5.7	6.1	5.8	6.0
Identity management	5.8	6.0	6.0	6.2	5.6	5.8
Bandwidth for Software as a Service / SaaS applications	4.4	4.4	4.7	4.6	4.4	4.1
Internet2	3.7	5.6	4.7	3.9	3.1	2.9
National Lambda Rail	2.7	4.4	3.0	3.1	2.2	2.2
Statenets / Statenet services	5.6	5.5	5.4	5.6	5.5	5.7
Spyware / malware	3.0	4.5	2.9	3.4	2.6	2.8
IT Disaster Communications Capacity	5.6	5.9	5.9	5.7	5.5	5.3
P-20 Education Continuum / Services	3.0	3.6	3.0	3.1	2.5	3.3
BYOD (Bring your own device) support	5.4	5.2	5.2	5.6	5.5	5.1
<i>mean scores; scale: 1=not important; 7=very important</i>						

CAMPUS COMPUTING 2012

The National Survey of Computing and Information Technology in American Higher Education

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Does your institution charge students for printing?						
No	25.6	11.1	11.6	17.6	34.6	31.8
Annual / term fee for all printing	2.0	1.4	-	1.9	2.6	2.3
Annual / term fee for specific number of pages	14.4	13.9	18.6	18.5	14.7	9.3
Pay for use / individual page charges	41.3	61.1	58.1	46.3	25.1	44.2
Other payment plan for printing services	16.8	12.5	11.6	15.7	23.0	12.4
Is your institution reviewing or converting to Cloud Services for the following applications:						
<i>Email</i>						
No	21.2	12.5	14.0	15.7	22.5	31.0
Under review	23.4	25.0	27.9	27.8	19.4	23.3
Converting to / now using	55.4	62.5	58.1	56.5	58.1	45.7
<i>Calendaring</i>						
No	34.8	25.0	25.6	37.0	31.4	46.5
Under review	26.2	27.8	30.2	27.8	23.0	27.1
Converting to / now using	39.0	47.2	44.2	35.2	45.6	26.4
<i>Administrative computing / ERP services</i>						
No	75.7	73.6	72.1	74.1	77.0	77.5
Under review	18.4	20.8	20.9	15.7	20.9	14.7
Converting to / now using	5.9	5.6	7.0	10.2	2.1	7.8
<i>CRM services</i>						
No	64.6	58.3	62.8	57.4	61.8	79.1
Under review	18.8	23.6	18.6	24.1	17.8	13.2
Converting to / now using	16.6	18.1	18.6	18.5	20.4	7.8
<i>Learning management systems / LMS services</i>						
No	43.5	54.2	44.2	49.1	42.4	34.1
Under review	18.4	19.4	25.6	19.4	17.8	15.5
Converting to / now using	38.1	26.4	30.2	31.5	39.8	50.4
<i>Research and HPC activities</i>						
No	79.9	61.1	58.1	75.9	84.3	94.6
Under review	16.8	30.6	34.9	21.3	12.6	5.4
Converting to / now using	3.3	8.3	7.0	2.8	3.1	-
<i>Storage / archiving / business continuity</i>						
No	40.7	34.7	30.2	28.7	39.8	58.9
Under review	49.5	62.5	51.2	56.5	48.7	37.2
Converting to / now using	9.8	2.8	18.6	14.8	11.5	3.9
Is your institution reviewing or converting to outsourced / hosted applications:						
<i>Hosted / outsourced email</i>						
Students						
No	9.6	4.2	4.7	6.5	13.1	11.6
Under review	14.9	13.9	14.0	18.5	15.7	11.6
Converting to / now using	75.5	81.9	81.4	75.0	71.2	76.7
Faculty						
No	45.9	36.1	44.2	49.1	41.9	55.0
Under review	23.6	31.9	25.6	22.2	21.5	22.5
Converting to / now using	30.6	31.9	30.2	28.7	36.7	22.5
Provider						
Google	54.3	58.8	68.3	49.0	61.4	41.2
Microsoft	43.6	38.2	31.7	46.9	36.2	58.8
Zimbra	2.1	2.9	-	4.1	2.5	-
<i>Hosted / outsourced "office" applications</i>						
No	45.5	37.5	37.2	45.4	48.7	48.1
Under review	35.7	37.5	37.2	39.8	32.5	35.7
Converting to / now using	18.8	25.0	25.6	14.8	18.9	16.3
Product						
Google Apps / Docs for education	43.2	44.2	40.7	42.3	51.7	32.3
Microsoft Office Live / Office 365 for education	56.8	55.8	59.3	57.7	48.4	67.7
<i>percentages</i>						
ORGANIZATIONAL, PLANNING AND IMPACT ISSUES						
Academic and administrative computing are:						
Separate units	25.8	26.4	41.9	24.1	25.7	21.7
One single unit	74.2	73.6	58.1	75.9	74.4	78.3
Has your institution reorganized information services units within the past 2 years?*						
Academic computing	36.6	52.8	34.9	44.4	33.0	27.1
Administrative computing	35.9	55.6	37.2	42.6	29.3	28.7
Libraries	14.0	18.1	14.0	16.7	14.1	9.3
Telecom	26.0	37.5	25.6	33.3	21.5	20.2
Do you anticipate a reorganization of information services units within the next 2 years?*						
Academic computing	28.0	38.9	32.6	30.6	26.7	20.2
Administrative computing	25.2	26.4	34.9	30.6	22.5	20.9
Libraries	14.2	9.7	16.3	17.6	14.1	13.2
Telecom	22.8	23.6	25.6	25.9	20.4	22.5
Percentage of campuses that reorganized IT units in the past two years and expect to reorganize IT units again in the next two years						
Academic computing	15.7	27.8	20.9	18.5	12.6	9.3
Administrative computing	14.7	20.8	20.9	18.5	11.5	10.9
Libraries	4.6	5.6	7.0	7.4	4.2	1.6
Telecom	8.5	15.3	9.3	8.3	6.3	7.8
The heads of the academic and administrative units report to:						
<i>Academic computing</i>						
President	5.3	1.4	-	4.6	3.1	13.2
Provost (chief academic officer)	14.7	18.1	9.3	13.0	17.8	11.6
CIO or CTO	64.3	68.1	76.7	72.2	62.3	54.3
Other vice provost / vice president	12.3	6.9	11.6	6.5	15.7	15.5
Dean	3.3	5.6	2.3	3.7	1.1	5.4

CAMPUS COMPUTING 2012

The National Survey of Computing and Information Technology in American Higher Education

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<i>Administrative computing</i>						
President	6.3	1.4	-	3.7	3.1	17.8
Provost (chief academic officer)	6.6	8.3	-	8.3	8.4	3.9
CIO or CTO	71.6	81.9	83.7	81.5	68.6	58.1
Other vice provost / vice president	14.4	8.3	16.3	5.6	19.9	16.3
Dean	1.1	-	-	0.9	-	3.9
<i>Libraries</i>						
President	0.7	-	-	0.9	-	2.3
Provost (chief academic officer)	62.3	77.8	74.4	71.3	67.0	34.9
CIO or CTO	8.7	2.8	4.7	9.3	11.0	9.3
Other vice provost / vice president	13.4	5.6	11.6	8.3	12.0	24.8
Dean	14.9	13.9	9.3	10.2	10.0	28.7
Does institution have a chief information / technology officer (CIO / CTO)?						
No	12.0	5.6	9.3	6.5	13.6	18.6
Currently under discussion	3.1	1.4	2.3	0.9	5.8	2.3
Yes	84.9	93.1	88.4	92.6	80.6	79.1
What academic and operational units report to the CIO / CTO?*						
Academic computing	86.4	87.1	87.8	85.2	88.1	84.0
Administrative computing	96.7	98.6	97.6	95.4	97.7	95.0
Libraries	12.1	2.9	9.8	10.2	17.0	12.6
Media center	61.7	54.3	65.9	64.8	67.0	53.8
Telecommunications	89.9	95.7	92.7	90.7	89.8	84.9
Distance / online education programs	21.0	15.7	22.0	23.1	19.3	24.4
The CIO reports to:						
President	32.9	28.2	22.0	32.4	27.4	47.9
Provost / vice president for academic affairs	26.1	38.0	36.6	30.6	26.3	10.9
CFO / vice president for business / admin affairs	32.3	25.4	31.7	29.6	37.1	31.9
Other	8.8	8.5	9.8	7.4	9.1	9.2
Is the CIO (or senior institutional computing / IT officer) a member of the president's cabinet / executive committee?	52.3	60.0	58.5	48.6	44.6	60.5
Does your institution have a board / trustee committee on computing / information technology?						
No	65.8	56.9	62.8	58.3	73.3	66.7
Under discussion	8.1	9.7	9.3	6.5	7.3	9.3
To begin in A / Y 2012-13	0.6	2.8	-	0.9	-	-
Yes, current board committee on computing / IT issues	25.6	30.6	27.9	34.3	19.4	24.0
Which unit provides tech support for most departmental computer labs?						
Individual department	5.7	19.4	14.0	7.4	1.1	0.8
Central IT service unit	69.8	23.6	34.9	63.9	85.3	89.2
Both	24.5	56.9	51.2	28.7	13.6	10.1
How does your institution deal with the "life cycle" of desktop computers for faculty, classrooms, clusters, and labs?						
One time allocation	9.2	22.2	7.0	9.3	6.3	7.0
Developing budget	19.5	33.3	16.3	29.6	5.8	24.8
Have budget	71.3	44.4	76.7	61.1	88.0	68.2
What types of security incidents did your campus experience in the past year?						
Theft of computer(s) containing confidential data files	19.6	39.4	41.9	17.6	13.6	11.6
Hack / attack on the campus network	43.0	73.2	62.8	47.2	29.8	35.7
Hack / attack on student / personnel / alumni data files	8.5	23.9	7.0	7.4	5.2	6.2
Hack / attack on administrative / financial files	5.4	14.1	2.3	5.6	3.1	4.7
Hack / attack on research data files	4.2	15.5	11.6	1.9	1.6	1.6
Other attack on institutional data files	7.2	23.9	11.6	5.6	3.7	3.1
Identity management issues	25.8	45.1	37.2	29.6	18.8	18.6
Major computer virus infestation	11.3	23.9	11.6	10.2	5.2	14.0
Major spyware infestation	11.4	18.3	4.7	7.4	8.4	17.8
Student security "incident" related to social networking sites	14.9	19.7	20.9	23.1	11.0	9.3
Exposure / loss of sensitive data in distributed environment (server not managed by central services)	14.9	47.9	25.6	16.7	5.2	6.2
Intentional employee transgressions affecting IT security	8.5	15.5	4.7	5.6	4.2	14.7
<i>percentages</i>						
How concerned are you about the following security issues for your institution in the coming year?						
Theft of computer(s) containing confidential data files	4.0	4.3	4.3	4.1	4.0	3.6
Hack / attack on the campus network	3.9	4.1	4.0	4.0	3.8	3.9
Hack / attack on student / personnel / alumni data files	3.7	4.0	4.1	3.9	3.6	3.6
Hack / attack on administrative / financial files	3.8	4.0	4.0	3.9	3.7	3.7
Hack / attack on research data files	3.0	3.9	3.6	3.2	2.7	2.6
Other attack on institutional data files	3.6	3.9	3.7	3.7	3.4	3.4
Identity management issues	3.9	4.0	3.9	4.0	3.8	3.8
Major computer virus infestation	3.3	3.4	3.4	3.4	3.3	3.3
Major spyware infestation	3.4	3.5	3.3	3.5	3.4	3.4
Student security "incident" related to social networking sites	3.2	3.1	3.2	3.4	3.4	3.1
Exposure / loss of sensitive data in distributed environment (server not managed by central services)	3.6	4.5	4.1	4.0	3.3	3.1
Intentional employee transgressions affecting IT security	3.2	3.3	3.3	3.5	3.1	3.1
<i>mean scores; scale: 1=low to 5=high</i>						
How does your campus manage the institutional presence and messaging on Facebook, Twitter, and other social media?						
Individual departments operate with autonomy	44.6	56.9	53.5	52.8	40.3	34.1
Central office monitors the activities of individual departments and units, but not institutional policies	24.3	26.4	18.6	26.9	24.1	23.3
Central office responsible for setting overall policies for and monitoring individual departments and units	31.1	16.7	27.9	20.4	35.6	42.6
<i>percentages</i>						

CAMPUS COMPUTING 2012

The National Survey of Computing and Information Technology in American Higher Education

	All Institutions	Universities		4-Year Colleges		Community Colleges
		Public	Private	Public	Private	
How would you characterize your campus strategy on / engagement with Open Source applications?						
<i>None:</i> little if any interest in or deployment of Open Source applications	13.8	9.7	9.3	9.3	10.0	27.1
<i>Observing:</i> watching other institution with interest, but no testing or interest in deployment	25.4	22.2	20.9	25.9	22.5	32.6
<i>Limited use:</i> some Open Source activity, primarily testing or deployment in selected programs / departments	26.3	31.9	39.5	33.3	21.5	20.2
<i>Operational:</i> selective Open Source deployment, focused on key applications (LMS, portal, portfolio, portal, etc.)	18.6	16.7	14.0	15.7	27.2	10.9
<i>Mission critical:</i> now using or plan to deploy this year a number of Open Source academic, administrative, and research applications (LMS, content mgmt, portal, portfolio, etc.)	12.0	8.3	11.6	12.0	15.7	8.5
<i>Contributing:</i> strong support for Open Source applications plus a commitment and campus strategy to develop new / enhance current Open Source applications	3.9	11.1	4.7	3.7	3.1	0.8
Looking ahead, what's the likelihood that your institution will migrate (or has already migrated) to one or more Software as a Service (SaaS) or Open Source ERP modules by fall 2017? percent reporting high likelihood						
Software as a Service (SaaS) Apps						
Course / Learning Management System	39.9	31.0	37.2	40.7	41.9	41.9
Content Management System	22.7	11.3	23.3	25.9	25.7	21.7
Research Management System	5.7	12.7	2.3	9.3	4.7	1.6
Development System	5.5	7.0	2.3	7.4	4.7	5.4
Financial System	7.4	4.2	9.3	10.2	5.8	8.5
HR System	14.4	8.5	14.0	16.7	16.8	12.4
Student Information System	6.5	4.2	2.3	11.1	5.8	6.2
CRM services	22.3	25.4	25.6	30.6	23.6	10.9
Student ePortfolio System	27.2	18.3	30.2	26.9	38.9	14.0
Collaboration Platforms / Applications	26.8	19.7	20.9	31.5	33.5	18.6
Lecture Capture	22.0	16.9	27.9	22.2	24.6	18.6
Open Source ERP Apps						
Course / Learning Management System	32.7	21.1	32.6	30.6	46.6	20.2
Content Management System	20.1	15.5	20.9	25.0	22.5	14.7
Research Management System	6.5	15.5	9.3	9.3	3.1	3.1
Development System	2.6	2.8	2.3	6.5	1.6	0.8
Financial System	3.7	9.9	-	8.3	1.6	0.8
HR System	2.8	5.6	-	5.6	2.1	0.8
Student Information System	2.6	4.2	2.3	4.6	1.6	1.6
CRM services	3.9	2.8	2.3	6.5	3.7	3.1
Student ePortfolio System	14.6	16.9	14.0	15.7	16.8	9.3
Collaboration Platforms / Applications	13.8	12.7	14.0	14.8	16.8	9.3
Lecture Capture	11.6	9.9	14.0	14.8	10.5	10.9

percent reporting high likelihood (6/7); scale score: 1=low; 7-high



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P.O. Box 261242 • Encino, CA 91426-1242 • USA
campuscomputing.net