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October 2015

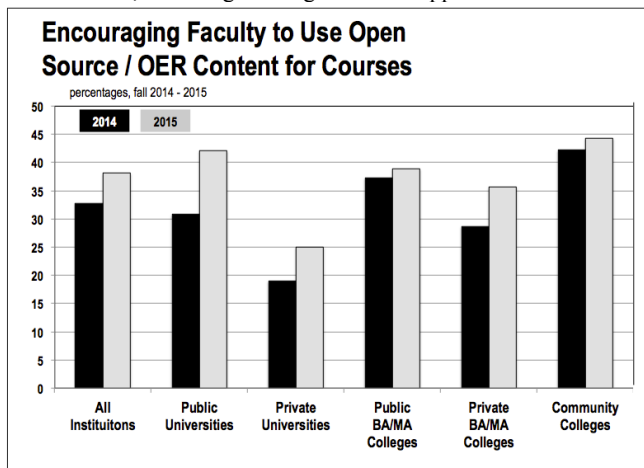
The 2015 National Survey of eLearning and Information Technology in US Higher Education

Great Faith in the Instructional Benefits of Digital Technologies; Great Expectations for the Rising Use of OER

New data from the 2015 Campus Computing Survey reveal that college and university CIOs and senior IT officers believe that digital technologies do (or will) have a significant impact on student learning and outcomes. Almost all (94 percent) of the fall 2015 survey participants, who represent 417 two- and four-year public and private colleges and universities, agree or strongly agree that “digital curricular resources make learning more efficient and effective for students.” Similarly, most (87 percent) report that “digital curricular resources provide a richer and more personalized learning experience than traditional print materials.” Finally, the survey participants also overwhelmingly agree (96 percent) that “adaptive learning technology has great potential to improve learning outcomes for students.” Across all segments and sectors, from community colleges to research universities, the numbers expressing support for the benefits of digital resources are very high on these three survey items.

Yet even as CIOs express great confidence about the impact and benefit of digital curricular resources, the current deployment numbers are low: survey participants estimate that just a tenth (10 percent) of general education courses make use of educational courseware, and just 4 percent of developmental and general education classes utilize adaptive learning technologies.

“This strong statement of support for digital instructional resources is not surprising,” says Kenneth C. Green, founding director of the Campus Computing Survey, which marks its 25 anniversary this fall. “CIOs and senior campus IT officers are, understandably, advocates for the instructional use of technology at their institutions. Although faculty make decisions about curricular resources for their courses, CIOs are responsible for the enabling infrastructure, including training and user support.”



Yet Green notes that clear and compelling evidence about the benefit of technology in instruction and the impact of IT on learning outcomes can be problematic. For example, the survey data reveal that just a fifth of the institutions that participated in the 2015 survey “have a formal program to assess the impact of IT on instruction and learning outcomes.” Consequently, says Green,

“decisions about IT in instruction are often fueled by good intentions, anecdotal data, opinion, and epiphany as opposed to research and hard evidence.” Green cites the continuing discussion about Learning Management Systems as an example: “Is the LMS just a platform that supports instruction or does the LMS – or a specific LMS platform – actually have a clear and discrete benefit on learning outcomes? Fully 15 years after many campuses first deployed a LMS, we really don’t have good data to provide a clear answer to this question.”

The Coming of OER

Related to the enthusiasm for digital instructional resources, four-fifths (81 percent) of the survey participants agree that “Open Source textbooks/Open Education Resource (OER) content “will be an important source for instructional resources in five years.” Advocates believe that OER titles, which are typically distributed to students in a digital format, offer a viable, very low cost alternative to expensive textbooks.

While the 2015 survey data indicate that OER utilization levels are currently low (just 6 percent of courses), fully two-fifths (38 percent) of the survey participants report that their institution encourages faculty to use OER content, up from a third (33 percent) in fall 2014.

“The emerging OER movement may offer a viable alternative to commercial textbooks and course content,” says Green. Yet he expresses some concern about the absence of infrastructure to support OER – the editors, fact-checkers, instructional designers and others who add value, as well as costs, to the development of commercial textbooks and course materials. Too, Green notes that many faculty depend on book updates as well as the ancillaries such as class presentation materials, test sets, and supporting web sites routinely provided by commercial publishers. While the immediate “text to text” comparisons may be favorable for OER, Green notes that “looming issues for the OER movement are the review process, ancillaries, and updates that many faculty have come to expect, even if the cost of these resources and services are paid by students when they purchase commercial titles.”

Top Five Campus IT Priorities Over the Next Two-Three Years, Fall 2015

1. Assisting faculty integrate technology into instruction (80%)

- Only 17% recognize instructional IT activity as part of faculty review/promotion process

2. Hiring / retaining qualified IT staff (78%)

- 74% report IT salaries are not competitive
- 26% reduced IT staffing
- 18% cut funds for professional development

3. Providing adequate user support (78%)

- User support overrated: 56% excellent??
- IT training for faculty: just 27% excellent??
- IT training for students: just 10% excellent??

4. Upgrading / enhancing network and data security (76%)

- 46% experienced an attack on the campus network in the past year (over 60% in univ.)
- 50% increased spending on IT security

5. Leveraging IT resources to support student success (74%)

- Only 21% assess impact of IT on instruction
- Just 27% report IT investments in analytics are “very effective”

Campus IT Priorities

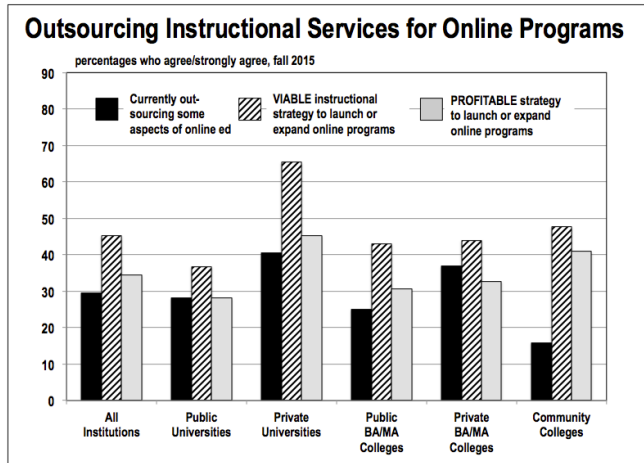
Again this fall, CIOs and senior campus IT officers identified “assisting faculty with the instructional integration of information technology” (80 percent) as the their top institutional IT priority over the next two-three years, followed by hiring and retaining qualified IT staff and providing adequate user support (both at 78 percent). Network and data security was fourth in the fall 2015 survey (76 percent), followed by “leveraging IT for student success, which dropped to fifth in 2015 from fourth in 2014 (74 percent).

“Viewed in aggregate, these data document the continuing challenges that CIOs and senior IT officers confront, and that faculty and students experience,” says Green. Moreover these priorities stand in stark contrast to some of the related survey data on these issues. For example, even as instructional integration is the top institutional IT priority again this fall, less than a fifth of campuses (17 percent) recognize instructional IT efforts as part of the faculty review and promotion process.

Similarly, although IT officers express concern about hiring and retaining qualified technology staff, three-fourths report that that salaries and benefits for tech staff at their institutions are not competitive with off-campus job opportunities. Moreover, a fifth of campuses cut funding for professional development for IT staff this past year, and a fourth reduced central IT staffing. And although IT user support is a perennial concern, only a fourth (27 percent) of CIOs and senior IT officers rate IT training for faculty and staff as excellent at their institution, while just a tenth (10 percent) believe that their campus offers excellent IT training for students.

Outsourcing Online Programs

In aggregate three-in-ten (29 percent) of the institutions participating in the 2015 survey report outsourcing their online programs, about the same as in 2014 and up from 23 percent in fall 2013. The outsourcing numbers range from 41 percent in private universities to 16 percent in community colleges. However, CIOs and senior campus IT officers are not upbeat about outsourcing: just 45 percent view outsourcing as a viable instructional strategy for their institution’s online efforts and only a third (34 percent) believe that outsourcing provides a profitable revenue strategy for online programs. The clear exception to these low numbers is in private universities, where two-thirds (65 percent) of CIOs and senior IT officers agree that outsourcing online programs is a viable academic strategy and more than two-fifths (45 percent) believe outsourcing also provides a viable revenue strategy.



Going Mobile

The 2015 survey documents the continuing campus movement to mobile. More than four-fifths (84 percent) of the institutions participating in this year’s survey have activated mobile apps or will do so in the coming academic year, compared to 78 percent in 2013, 60 percent in fall 2012, 42 percent in fall 2011, and 23 percent in fall 2010. Across sectors, private universities lead the mobile movement: 99 percent will be up on mobile apps by the end of the current academic year, followed by 92 percent of public

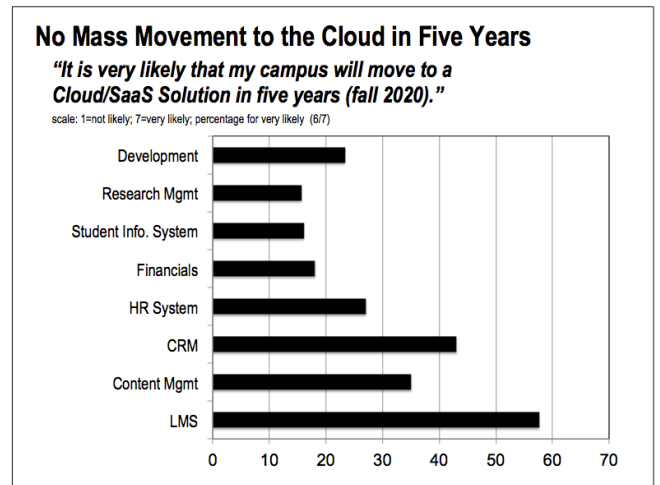
universities and public BA/MA colleges, 79 percent of community colleges, and 73 percent of private BA/MA institutions.

What explains these gains in going mobile? “Colleges and universities continue to play catch-up with the consumer experience. Students of all ages come to campus with their smartphones and tablets expecting to use mobile apps to navigate campus resources and use campus services,” says Green.

Interestingly, although CIOs and senior IT officers representing 70 percent of the institutions that participated fall 2015 survey identify “implementing/supporting mobile computing” as a top institutional IT priority over the next two-three years, less than a fifth (17 percent) rate mobile services at their institution as “excellent,” about the same as in 2014.

Small Gains in Cloud Computing

The proportion of campuses reporting a strategic plan for Cloud computing rose to 33 percent in fall 2015, up from 29 percent last year, 21 percent in 2011, and 9 percent in 2009. Just 12 percent of the survey participants report that their campus has moved or is converting to Cloud Computing for ERP (administrative) services, compared to 9 percent last year, 6 percent in 2012, and up from 4 percent in 2011 (range: from 22 percent for private universities to 4 percent for public universities.) Almost a third (30 percent) appear convinced that Cloud computing is no more secure than their own, on-campus management of technology and data. And less than a fifth of institutions expect to be running mission-critical finance and student information systems on the Cloud by fall 2020.



The 2015 Campus Computing Survey is based on data provided by senior campus IT officials, typically, the CIO, CTO, or other senior campus IT officer, representing 417 two- and four-year public and private/non-profit colleges and universities across the United States. Survey respondents completed the online questionnaire from September 17 through October 22. PDF copies of the 2015 Campus Computing Survey will be available on December 10th from The Campus Computing Project in Encino, CA (campuscomputing.net). Price: \$45, which includes shipping to US addresses.

THE CAMPUS COMPUTING PROJECT

Begun 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 2015 Campus Computing Survey was supported, in part, by the following project sponsors: Apple, Blackboard, Campus Management, CampusWorks, Canvas by Instructure, Cengage Learning, Dell, Desire2Learn, Echo360, Ellucian, The Bill & Melina Gates Foundation, Google, IBM Higher Education, Jenzabar, Kaltura, QualiCo, Longsight, Macmillian New Ventures, McGraw-Hill Higher Education, Microsoft, Moran Technology Consulting, Oracle, Pearson, rSmart Group, Sonic Foundry, TouchNet Information Systems, and Unicorn.

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

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The 26th National Survey of Computing, eLearning,
and Information Technology in US Higher Education

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Methodology

- 417 institutional participants
- Web-based data collection
- Survey period: Sept. 17 – Oct. 21
- 75 pct. of the 2015 participating colleges and universities also completed the 2014 survey

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2015 Survey Participants

<u>Category</u>	<u>Dept of Ed N (adjusted)</u>	<u>Survey N</u>	<u>Participation Rate (%)</u>
Public Research & Doctoral Universities	168	57	34%
Private Research & Doctoral Universities	92	32	35%
Public 4-Year Colleges (Baccalaureate & Masters)	374	72	19%
Private 4-Year Colleges (Baccalaureate & Masters)	824	168	20%
Associate Degree/ Public Community Colleges	1018	88	9%

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2015 Highlights

- Top IT priorities focus on instruction, staffing, user support, advancing the campus completion agenda, and IT security.
- Big differences in the CIO assessments of the *things we do/provide* vs. the *things we buy*.
- Great faith in the benefits of adaptive learning and digital curricular resources.
- Slow transition to the Cloud continues; Cloud security is a big concern for a significant minority.
- Rising institutional support for Open Educational Resources.

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New Survey Items for 2015

	Pct. Agree
We have a difficult time retaining IT talent because our salaries and benefits are not competitive with off-campus job opportunities.	74
Digital curricular resources make learning more efficient and effective for students.	94
Adaptive learning technology has great potential to improve learning outcomes for students.	96
Third party Cloud Services (Amazon, Google, IBM, Microsoft) services (Amazon, Google, IBM, Microsoft) are an important part of our campus plan to offer high performance computing services.	69

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Top Five Campus IT Priorities Over the Next Two-Three Years, Fall 2015

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

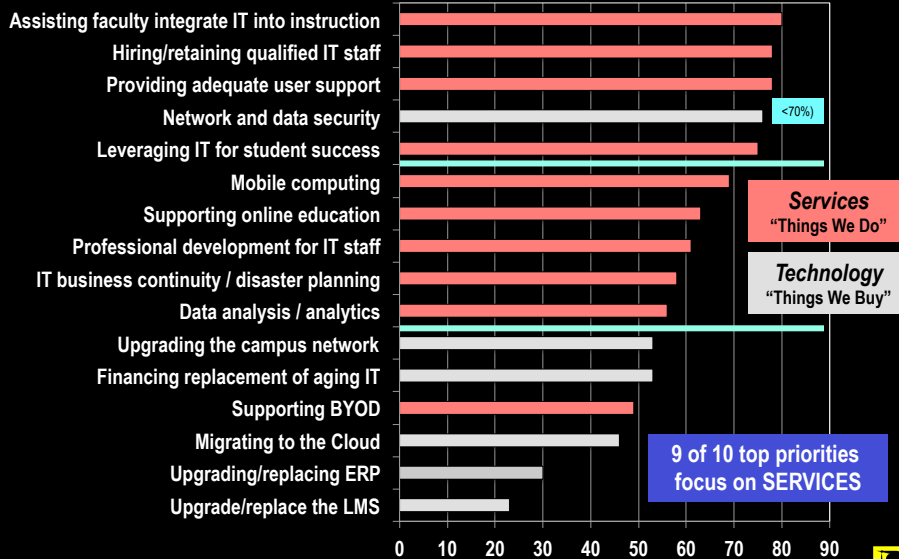
Assisting faculty integrate technology into instruction (80%)	<ul style="list-style-type: none"> Only 17% recognize instructional IT activities as part of the faculty review/promotion process
Hiring / retaining qualified IT staff (78%)	<ul style="list-style-type: none"> 74% report IT salaries are not competitive 26% reduced IT staffing 18% cut funds for professional development
Providing adequate user support (78%)	<ul style="list-style-type: none"> User support overrated: 56% <i>excellent??</i> IT training for faculty: <i>just 27% excellent??</i> IT training for students: <i>just 10% excellent??</i>
Upgrading / enhancing network and data security (76%)	<ul style="list-style-type: none"> 46% experienced an attack on the campus network in the past year (over 60% in univ.) 50% increased spending on IT security
Leveraging IT resources to support student success (74%)	<ul style="list-style-type: none"> Only 21% assess impact of IT on instruction Just 27% report IT investments in analytics are "very effective"

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Top Institutional IT Priorities Over the Next Two-Three Years, Fall 2015

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



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Top Three Institutional IT Priorities by Sector, Fall 2015

All Campuses	Public Universities	Private Universities	Public BA/MA Colleges	Private BA/MA Colleges	Community Colleges
Assisting Faculty Integrate IT into Instruction (81%)	Hiring/Retaining Qualified IT Staff (80%)	Hiring/Retaining Qualified IT Staff (87%)	Leveraging IT Resources for Student Success (90%)	Assisting Faculty Integrate IT into Instruction (81%)	Providing Adequate User Support (83%)
Hiring/Retaining Qualified IT Staff and IT User Support (78%)	Leveraging IT Resources for Student Success (79%)	Assisting Faculty Integrate IT into Instruction and IT Security (81%)	Assisting Faculty Integrate IT into Instruction (88%)	Network and Data Security (77%)	Mobile Computing and Online Courses (78%)
Network and Data Security (76%)	Providing Adequate User Support (77%)	Providing Adequate User Support (78%)	IT Staffing and User Support (85%)	IT Staffing and User Support (74%)	Hiring/Retaining Qualified IT Staff (77%)

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CIOs Have Great Faith in The Benefits of Digital Technologies for Instruction

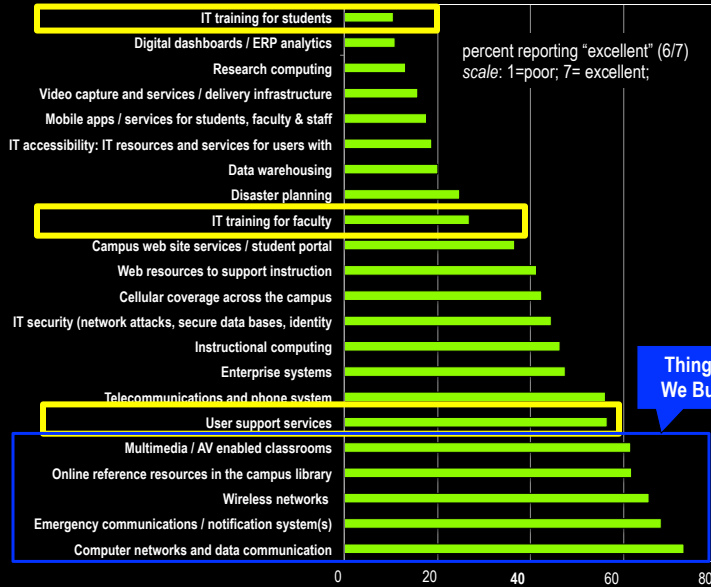
	Agree/ St. Agree	<p><i>But deployment numbers are currently low:</i></p> <ul style="list-style-type: none"> • Only 10% of general education classes use courseware • Just 4% of developmental and general ed. courses use adaptive learning technologies
Digital curricular resources make learning more efficient and effective for students.	94%	
Digital curricular resources provide a richer and more personalized learning experience than print materials.	87%	
Adaptive learning technology has great potential to improve learning outcomes for students.	96%	



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Rating the IT Infrastructure, Fall 2015

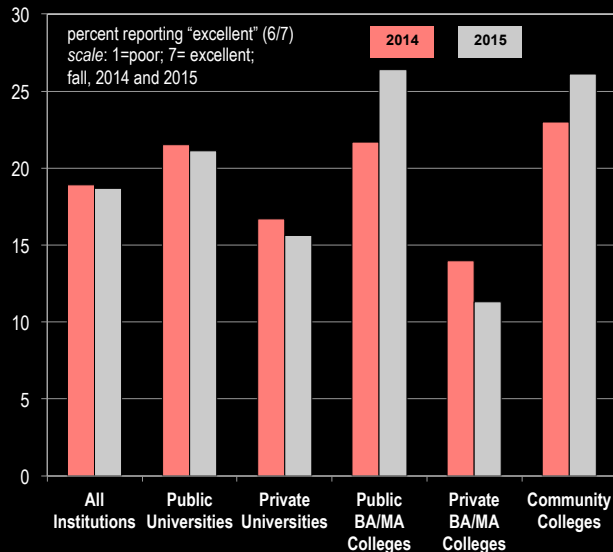


- Highest rankings for the network, "hardware," and content
- Lower rankings for services
- Would faculty and students agree with the ranking for user support services?

Things We Buy

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CIO Assessments of Digital Resources and Services for Disabled Users



- Campuses struggle to provide legally-mandated digital access and resources to disabled students
- Only half (50%) have a strategic plan for ADA/Sec. 503 compliance

Litigation Waiting to Happen



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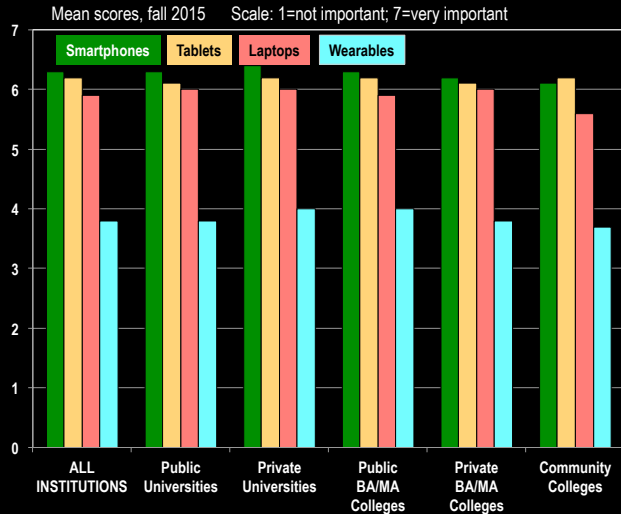
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IT Planning & Policy Issues, Fall 2015

Smartphones and Tablets Over Laptops!

How important are these hardware issues for campus IT planning and policy over the next 2-3 years?



“Skating to where the digital puck” is going:

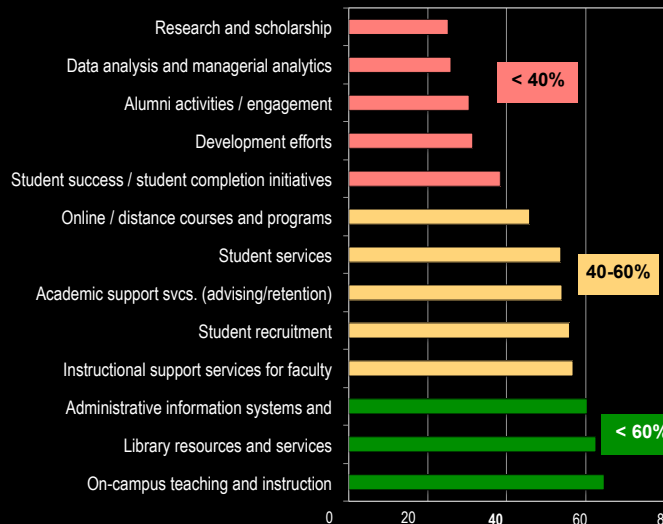
- A consistent and clear message that new platforms are more important in IT planning than old hardware.

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CIOs Rate the Effectiveness of Campus Investments in Information Technology, Fall 2015

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



- Continue to see very mixed assessments about the effectiveness of campus IT investments

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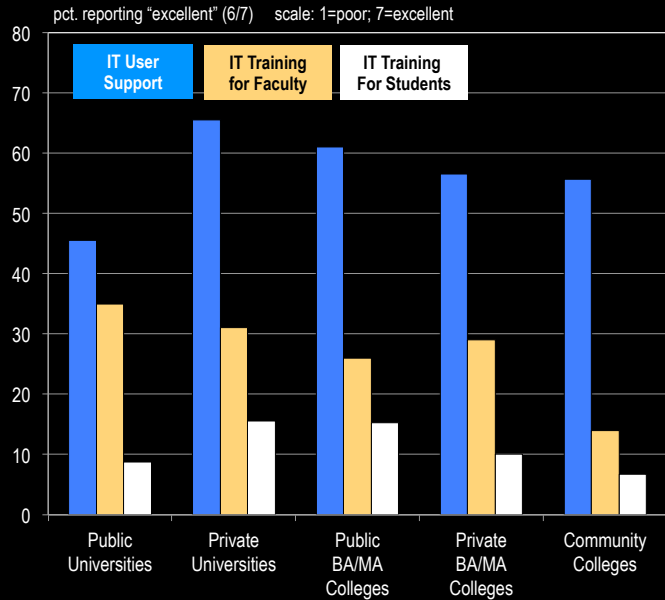


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The Challenge of Effective IT User Support

IT user support is a top IT priority (#3 / 78%)



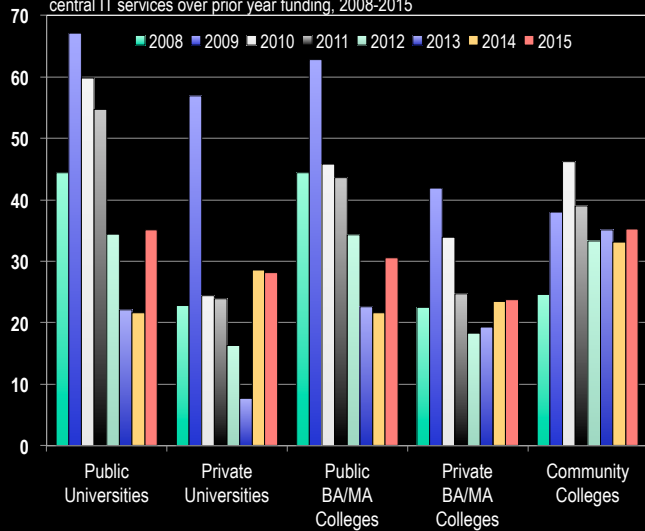
- Just 58% report IT user support services are "excellent"
- Less than a third provide "excellent" IT training for faculty
- Just a tenth provide "excellent" training for students

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Budget Cuts, 2008-2015

percentage of institutions reporting budget reductions for central IT services over prior year funding, 2008-2015



- Still experiencing the compounding consequences of continuing budget cuts
- Community Colleges still suffering
- Almost a fourth of institutions (24%) experienced mid-year IT budget cuts, averaging 2.6%

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Budget Cuts vs. Budget Gains, Fall 2015

percentage of institutions reporting budget increases or cuts, by budget category, fall 2015	Increase	Decrease
Total Budget, Central IT	36.2	29.3
Wireless Networks	50.6 ↑	5.5 ↓
User Training and Support	18.4	12.0 ↓
ERP Software and Services	41.3	4.8
Mobile Computing Resources	34.3	4.6
IT Security Issues and Resources	50.1	3.8
Cloud Computing	38.4	4.3
Professional Development	22.3	19.5
Business Analytics	35.3	6.1

↑ Big gain in 2015 ↓ Big decline in 2015

- Investing in wireless, security, cloud, mobility & analytics
- Reduced spending in public labs and for replacement hardware
- Student lab computer replacement cycle now 4-5 years (69%) vs. 2-3 years (55%) in 2008

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ERP Expenditures, Fall 2015

(estimated annual expenditures for licensing and maintenance fees)

	All Institutions	Universities		MA & BA Colleges		Community Colleges
		Public	Private	Public	Private	
Alumni / Advancement / Development	\$ 49,539	\$140,558	\$100,991	\$ 31,452	\$ 34,315	\$ 11,369
Business Intelligence / Big Data analytics	\$ 75,130	\$208,039	\$ 69,599	\$ 88,885	\$ 26,227	\$ 43,855
CRM	\$ 62,673	\$106,026	\$117,641	\$ 42,729	\$ 55,833	\$ 40,965
Finance / Accounting	\$ 159,775	\$393,032	\$519,419	\$ 99,457	\$ 56,722	\$ 73,423
ePortfolio services	\$ 14,703	\$ 23,585	\$ 44,134	\$ 8,191	\$ 10,507	\$ 7,672
Grants and Research Management	\$ 53,020	\$178,188	\$ 84,183	\$ 23,459	\$ 4,473	\$ 6,310
Learning Management Systems / LMS	\$ 128,411	\$276,769	\$174,137	\$125,492	\$ 78,290	\$ 94,778
Lecture Capture and Campus Video Mgmt.	\$ 45,418	\$150,060	\$ 47,242	\$ 31,515	\$ 18,851	\$ 17,793
Library System Management	\$ 77,703	\$245,813	\$ 80,196	\$ 60,099	\$ 48,977	\$ 31,923
Human Resources (recruitment)	\$ 33,204	\$ 84,239	\$ 38,326	\$ 35,957	\$ 16,711	\$ 18,528
Human Resources (HR records and payroll)	\$ 130,101	\$532,910	\$227,233	\$ 41,067	\$ 35,969	\$ 42,042
Student information system	\$ 219,449	\$619,727	\$308,038	\$150,384	\$112,957	\$ 154,634

- Core ERP spending accounts for about 9-10% of total central IT expenditures.
- Less dollars for ERP in community colleges but a larger proportion of the IT budget (11-12%)

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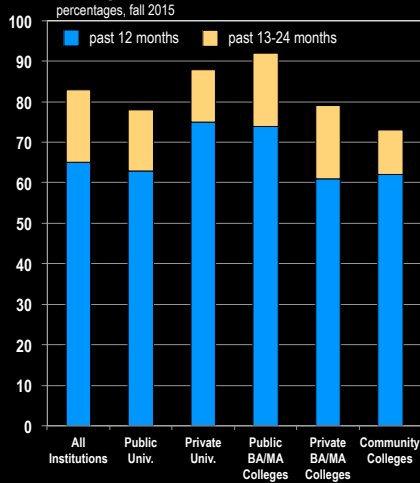
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Updating Campus IT Security & Disaster Plans, 2015

- 22 pct. DO NOT have a strategic plan for network and data security
- 32 pct. DO NOT have a strategic plan for IT disaster recovery

Last Update for Network & Data Security



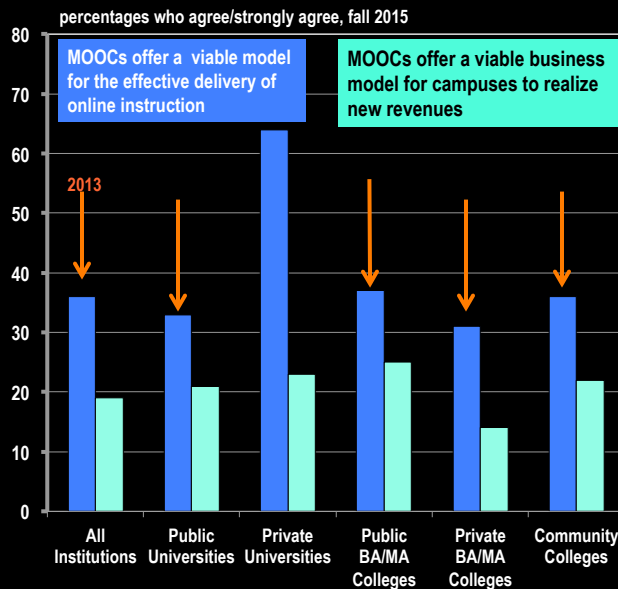
Last Update for IT Disaster Recovery



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Declining Confidence in MOOCs



BIG DECLINES IN THE THE 2015 DATA (10-15 points compared to 2013!)

- Four-fifths of CIOs are uncertain about the MOOC revenue model.
- Private Univ. CIOs support the academic model but doubt the financial model.

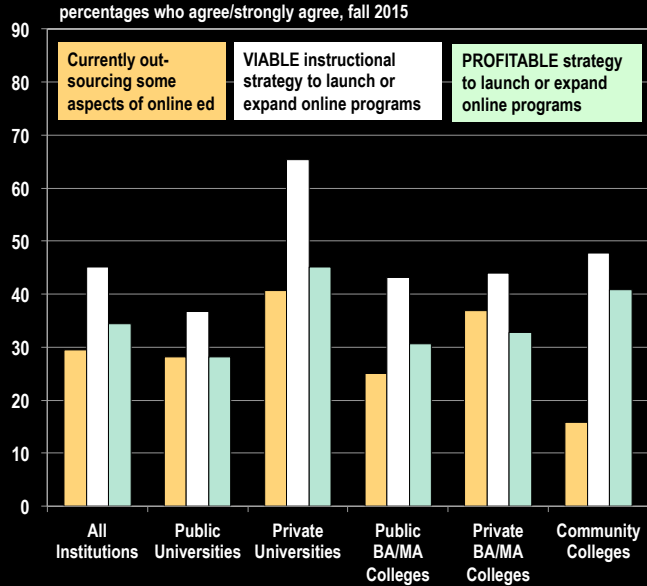
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Outsourcing Instructional Services for Online Programs?



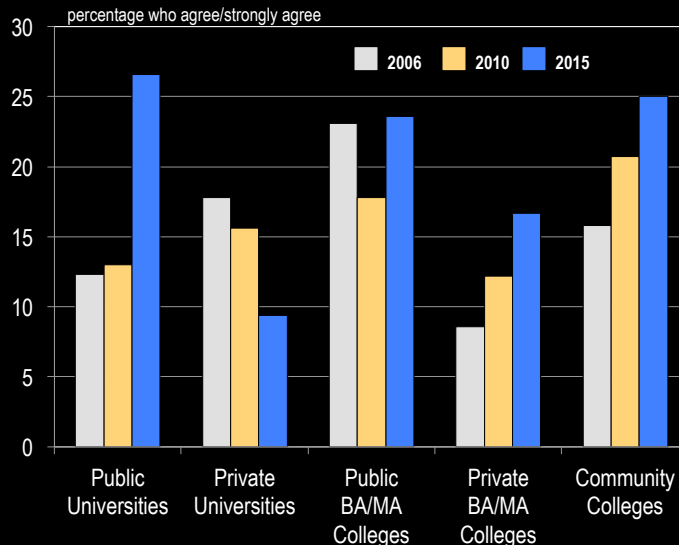
Are perspectives on MOOCs informed by real experience with outsourcing?

- Little change in the 2015 data vs. 2014.
- Outsourcing viewed as more effective for instruction than for profits.
- CIOs in private universities more supportive of outsourcing instructional services than their peers.

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“We are experiencing major cost over-runs / unexpected costs in our ERP deployment activities.”



- Cost problems seem to be structural in some ERP deployments


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Two Views of the Cloud

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The Tower and the Cloud addresses as it illustrates the promise, pitfalls and potential evolution of the academic work in a network-based world . . . in a future that may arrive faster than we expect.



Diana Oblinger
President
EDUCAUSE, 2008



Data from the 2015 Campus Computing Survey suggest that less than a fifth of CIOs and senior campus IT officers expect their institution to be deploying high-value, mission-critical Cloud-based ERP applications in five years – by fall 2020.



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What Kind of Clouds?

High Clouds
ERP, HPC & Storage

Middle Clouds
Calendar, CRM & LMS

Low Clouds
mail & calendar

A third of campuses (33%) now have a strategic plan for Cloud Computing, up from:

- 29% in 2014
- 27% in 2013,
- 24% in 2012,
- 21% in 2011,
- 15% in 2010 and
- 9% in 2009.

Highest in . Universities (38%)
Lowest in Comm. Colleges (22%)

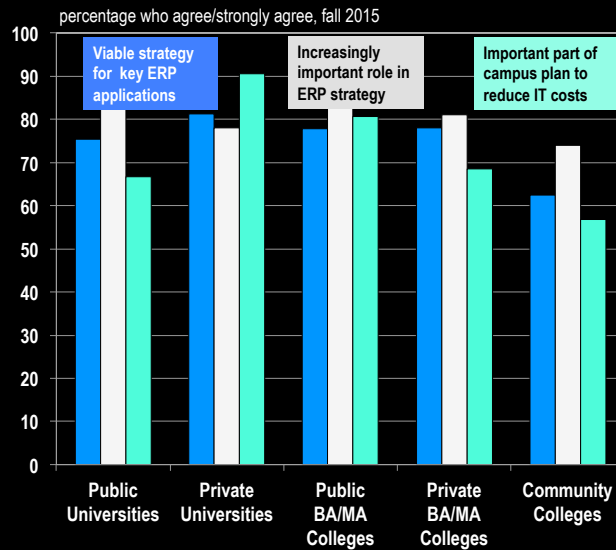
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Affirming the Strategic Importance of Cloud Computing

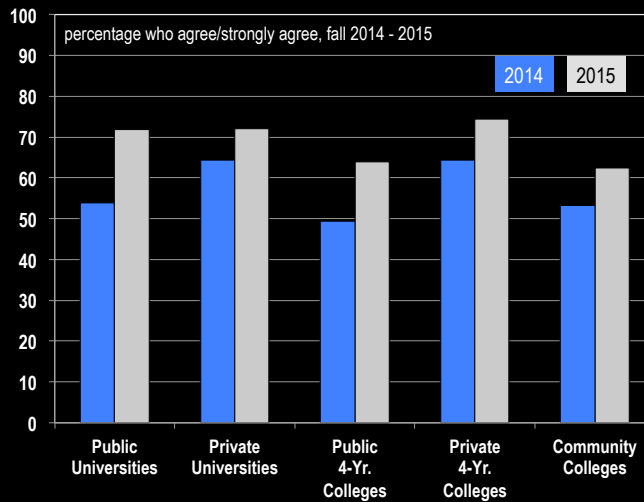


- Across all sectors, a clear message that CIOs view moving ERP applications to the Cloud as strategic for their institution.

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Is the Cloud Secure?


“Cloud computing services offer a level of security and reliability that equals or exceeds on-campus hosting”



Rising confidence in IT security from Cloud providers.

But ...

- A small number (6%) had a cloud security problem this past year (14% in public universities)
- A fifth (21%) report “high concern” for a cloud security incident in the coming year

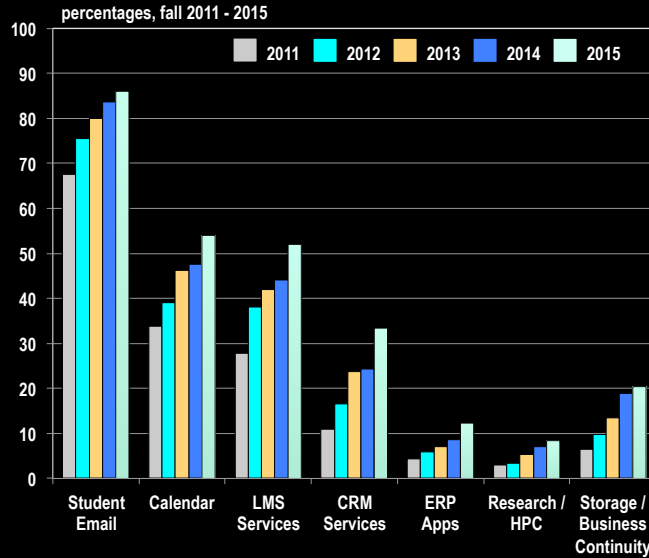
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The Cloud Slow Migration to Cloud Computing

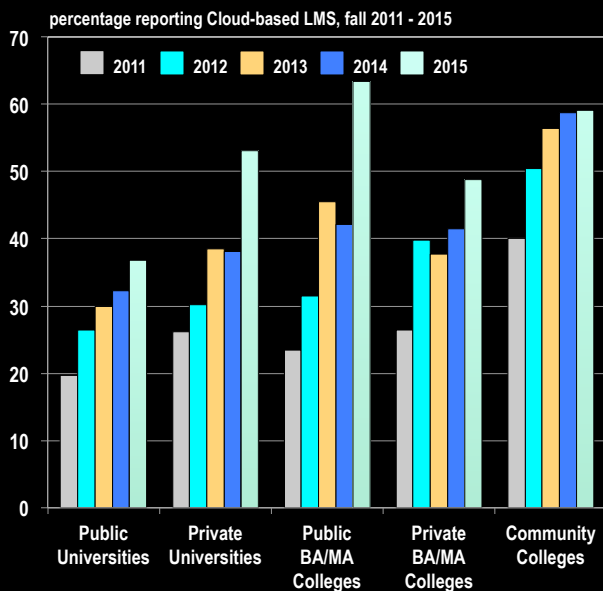


Still little movement to the Cloud for the really big, high-value tasks:

- Risk
- Limited options from providers
- Trust
- Control

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LMS Moves to the Clouds



- LMS providers seem to lead on Cloud services
- LMS as the “toe in the Cloud” experience for higher ed?

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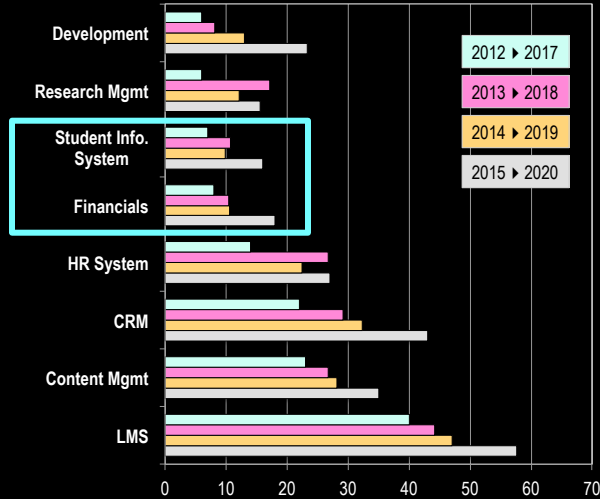
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No Mass Movement to the Cloud in Five Years

It is very likely that my campus will move to a Cloud/SaaS Solution in five years

scale: 1=not likely; 7=very likely; percentage for very likely (6/7)



Some gains in 2015, but most CIOs still don't see "high cloud" applications coming soon to their campuses

WHY?

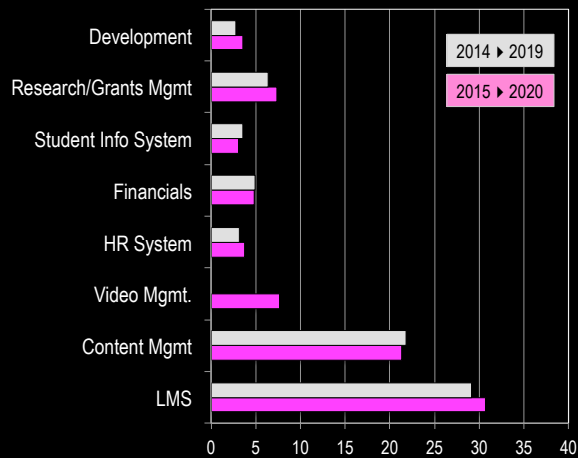
- Absence of clear path from ERP providers
- Can't visualize moving to Cloud
- Want to retain command and control
- Let others make the journey first

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No Mass Movement to Open Source ERP Applications by Fall 2019


High likelihood of my campus moving to an Open Source ERP Application in Five Years

(scale: 1=not likely; 7=very likely; pct. for 6/7)



WHY?

- Many Quali apps are still in development or early release phase
- Risk-averse campus culture
- Let others make the journey first
- Awaiting evidence regarding costs and effectiveness
- Impact of the Sakai - Unizin experience?

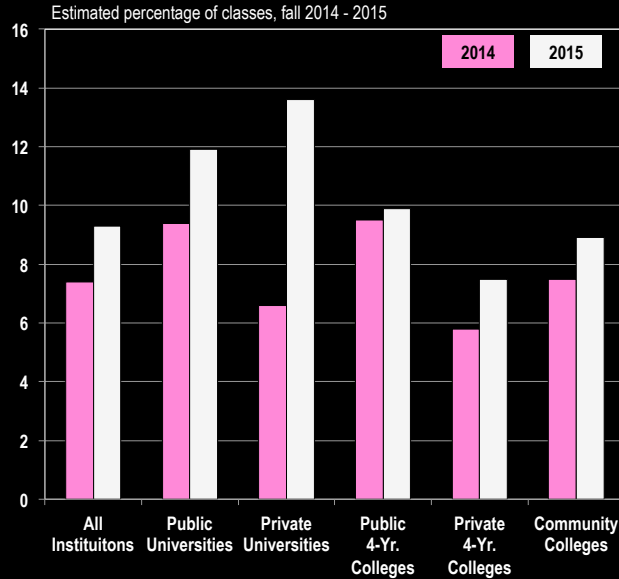
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Growing Use of Video Lecture



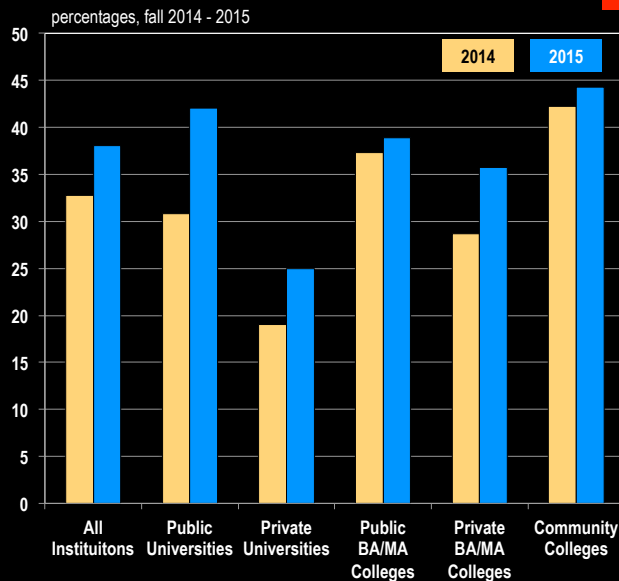
- Percentages understate real student numbers as much of the activity is in large, lower-division undergraduate classes.
- Video increasingly important for hybrid, flipped, and online courses

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Encouraging Faculty to Use Open Source / OER Content for Courses

9 in 10 (87%) report OER will be an important source of course content in 5 years.



- 6% of courses now using OER materials
- Small gains in formal institutional support for the use of OER course materials
- **BIG ISSUE:** Faculty concern about quality, ancillaries, and updates
- **LOOMING LARGE:** Faculty choice of instructional content

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Institutional Demography of LMS Providers, 2015

percentage of institutions reporting a campus-standard LMS

	All	Pub Univ	Private Univ	Public BA/MA	Private BA/MA	Comm Coll
Bb	39.1	50.9	50	40.7	33.9	35.2
D2L	11.8	8.8	6.3	20.8	3.0	25.0
Instructure (Canvas)	14.2	15.8	18.8	13.9	8.9	21.6
Moodle	21.6	7.0	9.4	19.4	37.5	6.8
Sakai	3.1	1.8	9.4	> 1.0	4.8	1.1

- Market presence varies by sector

3 Big LMS Stories

- Decline of Bb
- Rise of Canvas
- Sakai after Unizin

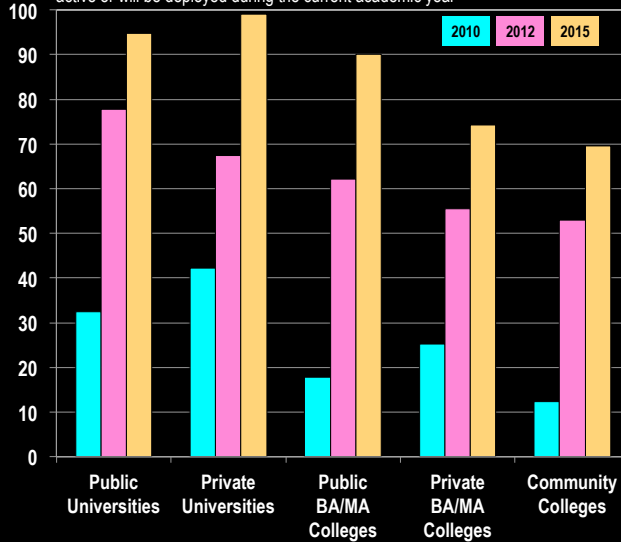
Three-fifths (61.6%) of campuses report plans to review the current LMS strategy for budget or other reasons

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Activating Mobile Apps, Fall 2010-2015

percentage of institutions reporting that mobile apps are now active or will be deployed during the current academic year



- Impact of student expectations and consumer market experience
- Almost half (48%) of campuses appear to be building their own mobile apps!

Although mobile is a top IT priority (#6 / 70%), only 18% of CIOs and sr. IT officers rate mobile services as "excellent"

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Shameless Self-Promotion



Campus Computing Celebrates 25 Years
of “Data, Information and Insight” on IT
Planning and Policy Issues



In God we trust;
all others bring data!



W. Edwards Deming

Campus Computing “Brings Data:

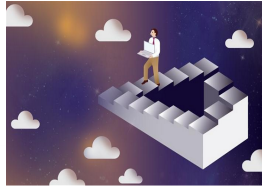
- **PRIORITIES:** identifying what really matters
- **TRENDS:** reporting how things change – and why
- **SECTORS:** higher ed is not one market, but many
- **NARRATIVE:** watching the digital puck and connecting the digital dots



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Why IT Matters to Higher Education
EDUCAUSEreview



Beginning
the Fourth
Decade of the
"IT Revolution"
in Higher
Education
**Plus Ça
Change**

Plus ça change, plus c'est la même chose.
("The more things change, the more things stay the same.")

Sept-Oct, 2015

"Over the past decade most institutions **have not invested** in formal efforts to assess the impact of technology on instruction and learning..."

"If campus officials are truly committed to advancing the role of technology in instruction, then it is time for these leaders to **stand up** for and **stand with** the faculty who are doing this work..."

"In the effort to make better use of data for decision-making, we have to address the **data culture** in higher education. We have stop using data as a weapon and commit to using data as a resource..."

"Much as we struggle with the meaning and attributes of quality in higher education, so too do **we struggle with the meaning and attributes of productivity**, particularly in the context of campus investments in and expenses for technology in research, instruction, operations and management, and support services..."

The Campus
Computing Project



Partner Is Not A Verb

(and Other Key Issues for Doing Business with Higher Ed)



MEMORANDUM

TO: Executive Officers, Acme Education Widgets
FR: Casey Green, Campus Computing (consultant)
RE: Partner is Not a Verb and Other Key Issues for
Doing Business in Higher Ed

My thanks again for the opportunity to serve as a consultant to Acme Education Widgets (AEW) as you ramp up for the launch into the higher education market this fall. We have talked candidly about both the challenges and the opportunities in higher education. I hope our conversations these past six months have proven to be useful and informative.

So October has finally arrived. As we have discussed, this month marks the beginning of the K-12 and higher-ed conference cycle. The first of these events for AEW will be the EDUCAUSE conference in Indianapolis at the end of this month. EDUCAUSE is the major annual gathering of higher-ed's technology tribes: some 7000-plus campus and tech industry personnel will spend several days wandering through a large exhibit hall, navigating several hundred panel presentations, attending multiple corporate receptions, and engaged in countless (if quick) hallway conversations. The obvious wisdom is to stay hydrated and wear comfortable shoes.

As you begin the final prep for the EDUCAUSE conference and other education industry events, I thought it might be useful to review some of the key issues we discussed about doing business and building relationships in the higher-ed market.

Campus clients want (and expect) concierge relationships; stated more directly, they want "one throat to choke."

1. **Partner is Not a Verb.** In both pitch meetings and hallway conversations, the tendency of many tech providers is to say that "we want to partner with you" as a way to signal significant interest and good intent. Don't do it!

Partner is not a verb—and it has become a meaningless term. Yes, you can tell potential education clients that you would like to work closely with them to address pressing issues and that you would welcome and appreciate their insight about how to improve what you do and provide. That's okay. But saying "partner," particularly for a young firm, suggests that you are trying too hard to "talk the talk" but don't know much about what can be a very long and challenging walk. You don't become partners with the wave of the digital wand. Rather, partners invest in and build trust with one another; that does not happen overnight.



What You Need to Know

1. Partner is not a verb.
2. Trust is the coin of the realm.
3. No "logo buddies."
4. You are not your client.
5. Your price is not your client's cost.
6. It's a neural network.



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campuscomputing.net



Casey Green

THE CAMPUS COMPUTING PROJECT

cgreen@campuscomputing.net • @digitaltweed
+1.818.990.2212



Casey Green is the founding director of The Campus Computing Project, the largest continuing study of the role of eLearning and information technology in American colleges and universities. The project is widely cited by campus officials and corporate executives as a definitive source for data, information, and insight about IT planning and policy issues affecting higher education.

An invited speaker at some two dozen academic and professional conferences each year, Green is the author or editor of some 20 books and published research reports and more than 100 articles and commentaries that have appeared in academic journals and professional publications. His *DigitalTweed* blog, recently cited by *EdTech* Magazine as one of the "50 must read higher ed IT blogs," is published by *Inside Higher Ed*.

In 2002 Green received the first EDUCAUSE Award for Leadership in Public Policy and Practice. The EDUCAUSE award cites his work in creating The Campus Computing Project and recognizes his "prominence in the arena of national and international technology agendas, and the linking of higher education to those agendas."

A graduate of New College (FL), Green earned his Ph.D. in higher education and public policy at the University of California, Los Angeles.



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	All	Universities		MA & BA Colleges		Community Colleges
	Institutions	Public	Private	Public	Private	
Number of Institutions	417	57	32	72	168	88
GENERAL CAMPUS POLICIES						
Does your institution have a written policy / code of conduct / acceptable or appropriate use policy for: <i>(percentages)</i>						
Campus-hosted individual / personal Web pages?	65.3	73.7	71.9	66.2	64.1	59.1
Fair use of copyrighted content (books, articles, etc.)?	93.5	100.0	90.6	93.0	93.4	90.9
Student use of social networking sites (Facebook, Twitter, etc.)?	37.1	28.1	40.6	25.4	44.9	36.4
Students to record (audio / video) class lectures presentations, and discussions?	12.3	15.8	9.4	15.5	12.6	8.0
Does your institution have a special computer use / technology fee or annual / term computer use charge for all students? <i>(percentages)</i>						
Average total annual (full-time) student fee or charge for A/Y 2015-16	\$ 245	\$ 223	\$ 405	\$ 184	\$ 357	\$ 163
Does your institution require or strongly recommend: <i>(percentages)</i>						
<i>Computers or laptops for all undergraduate students</i>						
No	46.6	52.6	25.0	47.2	27.0	87.5
Recommend	44.7	40.4	59.4	40.3	62.3	12.5
Require	8.7	7.0	15.6	12.5	10.8	-
<i>Computers or laptops for undergraduates in specific disciplines or academic programs</i>						
No	41.6	26.3	18.8	34.7	37.7	72.7
Recommend	36.1	33.3	53.1	38.9	43.1	15.9
Require	22.4	40.4	28.1	26.4	19.2	11.4
<i>Tablet devices (Android, Apple, or Microsoft-based) for all students</i>						
No	88.0	93.0	90.6	80.6	88.0	89.8
Recommend	10.1	7.0	9.4	18.1	8.4	9.1
Require	1.9	-	-	1.4	3.6	1.1
<i>Tablet devices for students in specific disciplines or academic programs</i>						
No	68.0	59.7	65.6	59.7	71.3	75.0
Recommend	18.3	19.3	15.6	23.6	16.8	17.1
Require	13.7	21.1	18.8	16.7	12.0	8.0
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?						
<i>percent "very important" (scale 6 / 7); scale: 1=not important; 7=very important</i>						
Assisting faculty integrate technology into instruction	80.3	75.0	81.3	86.1	81.5	76.1
Hiring / retaining qualified IT staff	78.4	80.4	87.5	84.7	73.8	77.3
Providing adequate user support	78.4	76.8	78.1	84.7	73.8	83.0
Upgrading / enhancing network and data security	75.7	71.4	81.3	80.6	76.8	70.5
Leveraging IT resources and services to advance the student success / student completion priorities of my institution	74.5	78.6	65.6	90.3	67.3	76.1
Implementing / supporting mobile computing	69.5	66.1	75.0	77.8	61.3	78.4
Supporting online / distance education courses and programs	63.5	75.0	62.5	76.4	46.4	78.4
Professional development for IT personnel (IT staff and senior IT officers)	61.1	57.1	56.3	72.2	60.1	58.0
IT business continuity / IT disaster planning and recovery	58.4	55.4	43.8	63.9	58.3	61.4
Data analysis / learning and managerial analytics	55.8	58.9	59.4	59.7	54.2	52.3
Upgrading / replacing the campus network	53.4	60.7	50.0	62.5	48.8	51.1
Financing the replacement of aging hardware / software	53.1	55.4	40.6	52.8	51.2	60.2
Supporting / managing BYOD (Bring Your Own Device)	49.5	46.4	37.5	51.4	46.4	60.2
Migrating to Cloud computing	45.9	53.6	59.4	55.6	44.0	31.8
Upgrading / replacing administrative IT / ERP systems	30.0	26.8	28.1	34.7	29.2	30.7
Shared services / IT collaboration with other institutions	29.8	35.7	12.5	41.7	25.0	31.8
Upgrading / replacing the current campus Learning Mgmt System (LMS)	24.3	33.9	18.8	31.9	22.0	18.2
Digital content management	23.8	23.2	18.8	26.4	23.2	25.0
Using / leveraging social media as a resource for instruction	17.3	19.6	6.3	19.4	13.1	26.1

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	All Institutions	Universities		MA & BA Colleges		Community Colleges
		Public	Private	Public	Private	
Has your institution established a specific single product standard for any of the following (i.e., your campus supports only one product or application)? (percentages)						
<i>Course / learning management system</i>						
No	5.5	14.0	6.3	2.8	4.2	4.6
Blackboard (including Angel)	39.1	50.9	50.0	41.7	33.9	35.2
CampusCruiser	-	-	-	-	-	-
Desire2Learn	11.8	8.8	6.3	20.8	3.0	25.0
eCollege	1.0	-	-	-	1.2	2.3
Google Classroom	-	-	-	-	-	-
Instructure (Canvas)	14.2	15.8	18.8	13.9	8.9	21.6
Jenzabar	1.7	-	-	-	4.2	-
Moodle	21.6	7.0	9.4	19.4	37.5	6.8
Sakai	3.1	1.8	9.4	-	4.8	1.1
Other	2.2	1.8	-	1.4	2.4	3.4
<i>Lecture capture system</i>						
No	41.0	29.8	18.8	27.8	53.0	44.3
Brightcove	0.2	-	-	-	-	1.1
Desire2Learn	0.7	-	3.1	1.4	0.6	-
Echo360	11.0	26.3	40.6	13.9	4.2	1.1
Kaltura	6.2	5.3	6.3	8.3	5.4	6.8
Matterhorn	0.2	-	-	1.4	-	-
Mediacore	0.7	-	-	-	1.8	-
Panopto	14.2	12.3	18.8	11.1	13.7	17.1
Polycam	0.2	-	-	-	0.6	-
Sharestream	0.2	-	-	-	0.6	-
Sonic Foundry (Mediasite)	5.5	7.0	12.5	8.3	4.8	1.1
TechSmith (Camtasia)	7.4	5.3	-	12.5	5.4	11.4
Tegrity	5.3	8.8	-	4.2	6.0	4.6
Vbrick	0.2	-	-	-	-	1.1
Other	6.7	5.3	-	11.1	4.2	11.4
As of Fall 2015, has your institution activated mobile apps (or mobile interfaces) for campus resources and services? (percentages)						
No	9.6	3.5	-	2.8	14.9	12.5
Yes	75.8	87.7	93.8	88.9	66.7	68.2
Planned for later this academic year (2015-16)	6.7	7.0	6.3	1.4	6.6	11.4
Currently under review	7.9	1.8	-	6.9	11.9	8.0
<i>Current / anticipated Mobile App Provider:</i>						
Blackboard	28.3	45.6	28.1	38.9	22.0	20.5
CampusCruiser	0.2	-	-	-	0.6	-
Campus Management	0.5	-	-	-	1.2	-
Desire2Learn	4.8	1.8	6.3	9.7	2.4	6.8
eCollege	0.7	-	-	-	1.2	1.1
Ellucian Mobile	29.3	22.8	28.1	27.8	29.2	35.2
Instructure	6.2	10.5	6.3	4.2	4.8	8.0
Jenzabar	8.4	-	3.1	1.4	15.5	8.0
Kauli	-	-	-	-	-	-
Moodlerooms	2.4	1.8	-	-	5.4	-
Oracle	1.4	1.8	3.1	4.2	0.6	-
uMobile	1.0	1.8	-	-	1.2	1.1
Other	48.0	54.4	62.5	52.8	43.5	43.2
USES OF INFORMATION TECHNOLOGY						
Key IT Issues (percentage who agree/strongly agree)						
Faculty have unreasonable expectations about user support services.	42.0	33.3	43.8	44.4	41.7	45.5
We are experiencing major cost over-runs / unexpected costs in our ERP deployment activities.	20.4	26.3	9.4	23.6	16.7	25.0
Cloud computing offers a viable strategy for key campus ERP applications.	74.6	75.4	81.3	77.8	78.0	62.5
Cloud computing will play an increasingly important role in our campus ERP strategy.	79.9	82.5	78.1	83.3	81.0	73.9

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	All Institutions	Universities		MA & BA Colleges		Community Colleges
		Public	Private	Public	Private	
Key IT Issues continued <i>(percentage who agree/strongly agree)</i>						
Cloud computing is an important part of our campus technology plan to reduce IT costs	69.5	66.7	90.6	80.6	68.5	56.8
Cloud computing services offer a level of data reliability and security that equals or exceeds the level of security and reliability we can provide with on-campus hosting.	69.5	71.9	71.9	63.9	74.4	62.5
Third-party cloud service providers (Amazon Google IBM Microsoft) are an important part of our campus plan to offer high performance computing services.	68.6	63.2	65.6	69.4	72.6	64.8
Given the exploding demand for network services, my campus should charge access fees for students who consume excess bandwidth -- more than 20Gb of bandwidth weekly.	24.2	17.5	21.9	22.2	23.8	31.8
Wearable technology will become an important part of our plan to offer IT resources to students.	29.3	24.6	32.3	34.7	29.8	26.1
Digital curricular resources make learning more efficient and effective for students	94.2	100.0	93.5	94.4	92.3	94.3
Digital curricular resources provide a richer and more personalized learning experience than traditional print materials	86.8	87.7	90.3	87.5	84.5	88.6
Adaptive learning technology has great potential to improve learning outcomes for students.	96.2	98.2	96.8	98.6	94.0	96.6
Open Source textbooks/OER content will be an important source for instructional resources in five years.	81.7	82.5	77.4	87.5	78.0	85.2
MOOCs offer a viable academic model for the effective delivery of online instruction.	36.1	33.3	64.5	37.5	31.0	36.4
MOOCs offer a viable business model for campuses to accrue new revenues from online courses.	19.0	21.1	22.6	25.0	13.7	21.6
Outsourcing instructional services (course development, user support, etc.) offers a viable and effective strategy for many campuses to launch / expand online courses and programs.	45.2	36.8	64.5	43.1	44.0	47.7
Outsourcing instructional services (course development, user support, etc.) offers a profitable strategy for many campuses to launch/expand online courses and programs.	34.4	28.1	45.2	30.6	32.7	40.9
We have a difficult time retaining IT talent because our salaries and benefits are not competitive with off-campus job opportunities.	74.0	80.7	77.4	81.9	67.3	75.0
CURRENT IT / COMPUTER FACILITIES AND RESOURCES						
Headcount enrollment on campus as of May 2015	10,636	26,972	11,810	11,929	3,175	12,815
Percentage of individuals who own desktop computers, notebook computers, smartphones, or tablets:						
<i>Students</i>						
Desktops	25.7	27.0	14.6	29.7	15.1	45.8
Notebooks	75.2	79.8	92.2	75.0	84.3	49.0
Smartphones	83.6	82.7	90.2	85.5	87.0	74.1
Tablets	34.0	37.7	36.8	36.5	33.9	28.6
<i>Faculty</i>						
Desktops	55.7	64.5	52.6	60.3	45.7	66.1
Notebooks	56.6	60.6	67.0	55.8	59.4	45.7
Smartphones	74.9	72.4	76.3	76.8	75.8	72.9
Tablets	34.9	36.6	37.5	34.9	35.5	31.8
Percentage of the classrooms that are multimedia or are AV enabled	80.6	73.8	77.8	79.2	80.3	87.9
Total number (FTE) of IT help desk / technical support personnel	31.4	84.2	92.8	31.8	10.5	14.4
User Support Ratio (enrollment / FTE help desk personnel)	338.7	320.3	127.3	375.1	302.4	889.9
Percentage of faculty with individual / personal Web page	26.0	29.3	39.0	29.3	25.5	17.0
Percentage of your faculty have taught an online course (80 pct of content online) over the past two years:						
Full-time faculty	25.2	27.7	21.5	29.0	15.9	39.7
Part-time faculty	22.4	25.3	19.6	26.7	16.5	29.4

CAMPUS COMPUTING 2015

	All	Universities		MA & BA Colleges		Community Colleges
	Institutions	Public	Private	Public	Private	
Percentage of classes that use:						
LMS / course management tools for online course resources	69.4	69.7	76.5	68.0	70.2	66.3
Audio lecture capture	7.5	8.5	10.8	7.1	6.2	8.5
Video lecture capture	9.3	11.9	13.6	9.9	7.5	8.9
"Clickers" / classroom response system	8.8	13.5	10.7	8.2	7.9	7.4
Anti-plagiarism software for written assignment	26.9	24.5	27.4	33.4	24.3	28.2
Open Source / OER curricular resources	5.6	6.5	6.7	4.4	5.8	5.4
Adaptive learning tools in developmental and general education courses	4.4	4.1	5.4	4.0	4.3	4.7
Courseware in general education classes	10.0	9.5	8.9	12.4	9.3	9.9
ACADEMIC & INSTRUCTIONAL COMPUTING POLICIES AND PROCEDURES & RESOURCES						
Does your campus / institution: (percentages)						
Have a policy or program for rewarding courseware development or providing incentives for faculty to develop instructional software / courseware or educational content?	41.0	57.9	37.5	52.8	29.8	43.2
Have a formal program to recognize and reward the use of information technology as part of the routine faculty review and promotion process?	17.7	14.0	9.4	18.1	13.1	31.8
Have a formal program to assess the impact of IT on instruction and learning outcomes?	20.9	19.3	28.1	22.2	17.3	25.0
Have a formal policy regarding ownership of Web-based curriculum resources and intellectual property developed by faculty?	62.1	80.7	71.9	69.4	51.2	61.4
Charge students for access to digital content (online reserve readings, course packets, recorded content, etc.)?	7.2	12.3	3.1	6.9	3.6	12.5
Inform / counsel students about privacy issues related to social networking sites (Facebook, LinkedIn, etc.)?	69.1	80.7	87.5	58.3	78.0	46.6
Encourage the use of the Creative Commons license on digital works?	44.6	66.7	59.4	40.3	43.5	30.7
Encourage faculty to use Open Source / OER instructional content for their courses?	38.1	42.1	25.0	38.9	35.7	44.3
Support faculty efforts to develop Open Source / OER instructional content for their courses?	36.2	40.4	31.3	43.1	30.4	40.9
Maintain a campus page on Facebook?	97.6	100.0	96.9	97.2	97.6	96.6
Have an institutional presence on YouTube?	93.0	96.5	96.9	93.1	93.5	88.6
Have an institutional presence on iTunesU?	59.2	84.2	84.4	65.3	51.2	44.3
Maintain an institutional account on Twitter?	95.0	98.2	96.9	93.1	97.0	89.8
Have a campus / department license for anti-plagiarism software (e.g., PlagScan, Turnitin, SafeAssign)?	75.3	86.0	90.6	95.8	62.5	70.5
Outsource various aspects of your online program activities (recruitment, course development, student services)?	29.5	28.1	40.6	25.0	36.9	15.9
Support Single Sign On (SSO) access to campus services?	76.3	89.5	78.1	90.3	69.0	69.3
Does your institution have a strategic plan for: (percentages)						
<i>Information technology</i>						
no	5.0	7.0	3.1	4.2	6.0	3.4
currently preparing a plan	18.0	19.3	12.5	13.9	23.2	12.5
yes	77.0	73.7	84.4	81.9	70.8	84.1
<i>Instructional technology / instructional integration of IT</i>						
no	15.4	17.5	6.3	15.3	17.3	13.6
currently preparing a plan	28.5	22.8	31.3	29.2	31.6	25.0
yes	56.1	59.7	62.5	55.6	51.2	61.4
<i>Deploying course / learning management tools</i>						
no	20.1	15.8	9.4	20.8	22.0	22.7
currently preparing a plan	15.8	10.5	15.6	20.8	18.5	10.2
yes	64.0	73.7	75.0	58.3	59.5	67.1
<i>Online / distance education</i>						
no	24.2	15.8	9.4	15.3	39.3	13.6
currently preparing a plan	21.8	19.3	31.3	22.2	26.2	11.4
yes	54.0	64.9	59.4	62.5	34.5	75.0
<i>Wireless networks</i>						
no	7.0	1.8	3.1	8.3	7.7	9.1
currently preparing a plan	8.4	10.5	3.1	6.9	7.7	11.4
yes	84.7	87.7	93.8	84.7	84.5	79.6

CAMPUS COMPUTING 2015

	All Institutions	Universities		MA & BA Colleges		Community Colleges
		Public	Private	Public	Private	
Does your institution have a strategic plan for: (percentages)						
<i>Network and data security</i>						
no	5.3	-	3.1	2.8	5.4	11.4
currently preparing a plan	17.0	17.5	9.4	15.3	20.8	13.6
yes	77.7	82.5	87.5	81.9	73.8	75.0
<i>IT disaster recovery</i>						
no	4.3	1.8	6.3	-	4.8	8.0
currently preparing a plan	27.8	33.3	9.4	19.4	33.3	27.3
yes	67.9	64.9	84.4	80.6	61.9	64.8
<i>Administrative systems / ERP upgrade / replacement</i>						
no	15.1	7.0	6.3	13.9	17.9	19.3
currently preparing a plan	19.2	19.3	18.8	15.3	19.6	21.6
yes	65.7	73.7	75.0	70.8	62.5	59.1
<i>Digital content management</i>						
no	31.2	31.6	18.8	22.2	31.6	42.1
currently preparing a plan	36.2	38.6	34.4	44.4	35.1	30.7
yes	32.6	29.8	46.9	33.3	33.3	27.3
<i>Data warehousing</i>						
no	30.0	17.5	12.5	19.4	38.7	36.4
currently preparing a plan	28.8	22.8	25.0	30.6	31.0	28.4
yes	41.3	59.7	62.5	50.0	30.4	35.2
<i>Business intelligence / analytics</i>						
no	26.9	10.5	9.4	22.2	34.5	33.0
currently preparing a plan	35.7	38.6	31.3	33.3	36.3	36.4
yes	37.4	50.9	59.4	44.4	29.2	30.7
<i>Open Source deployment and development</i>						
no	68.6	61.4	59.4	62.5	70.8	77.3
currently preparing a plan	12.2	15.8	12.5	13.9	8.9	14.8
yes	19.2	22.8	28.1	23.6	20.2	8.0
<i>Lecture capture (audio and video)</i>						
no	30.9	17.5	6.3	22.2	36.3	45.5
currently preparing a plan	29.3	24.6	25.0	38.9	31.6	21.6
yes	39.8	57.9	68.8	38.9	32.1	33.0
<i>Campus video management</i>						
no	28.5	31.6	25.0	23.6	29.2	30.7
currently preparing a plan	26.4	26.3	21.9	30.6	24.4	28.4
yes	45.1	42.1	53.1	45.8	46.4	40.9
<i>Emergency communications / notification</i>						
no	2.2	-	-	-	3.6	3.4
currently preparing a plan	2.6	1.8	-	1.4	3.6	3.4
yes	95.2	98.3	100.0	98.6	92.9	93.2
<i>Digital preservation / data archiving</i>						
no	24.9	22.8	12.5	27.8	23.2	31.8
currently preparing a plan	37.4	47.4	53.1	29.2	38.7	29.6
yes	37.7	29.8	34.4	43.1	38.1	38.6
<i>Cloud computing</i>						
no	27.1	22.8	12.5	20.8	25.0	44.3
currently preparing a plan	39.8	38.6	50.0	41.7	40.5	34.1
yes	33.1	38.6	37.5	37.5	34.5	21.6
<i>Server virtualization</i>						
no	6.2	1.8	-	5.6	7.7	9.1
currently preparing a plan	13.0	8.8	9.4	9.7	14.3	17.1
yes	80.8	89.5	90.6	84.7	78.0	73.9
<i>Disability accessibility / compliance for Web resources</i>						
no	19.9	5.3	15.6	11.1	33.3	12.5
currently preparing a plan	30.5	40.4	46.9	19.4	30.4	27.3
yes	49.6	54.4	37.5	69.4	36.3	60.2
<i>Email and document archiving to address eDiscovery</i>						
no	25.2	12.3	18.8	19.4	32.7	26.1
currently preparing a plan	24.9	26.3	18.8	25.0	22.6	30.7
yes	49.9	61.4	62.5	55.6	44.6	43.2

CAMPUS COMPUTING 2015

	All Institutions	Universities		MA & BA Colleges		Community Colleges
		Public	Private	Public	Private	
Does your institution have a strategic plan for: (percentages)						
<i>Identity and access management</i>						
no	14.2	5.3	6.3	9.7	17.9	19.3
currently preparing a plan	37.9	40.4	28.1	33.3	39.3	40.9
yes	48.0	54.4	65.6	56.9	42.9	39.8
<i>Digital textbooks / digital curricular materials</i>						
no	46.0	38.6	34.4	34.7	55.4	46.6
currently preparing a plan	41.0	40.4	53.1	45.8	36.9	40.9
yes	13.0	21.1	12.5	19.4	7.7	12.5
<i>Social media (Facebook, Twitter, etc.)</i>						
no	21.6	22.8	9.4	22.2	23.8	20.5
currently preparing a plan	30.0	36.8	34.4	36.1	24.4	29.6
yes	48.4	40.4	56.3	41.7	51.8	50.0
<i>Mobile computing / mobile resources and services</i>						
no	22.5	24.6	6.3	15.3	24.4	29.6
currently preparing a plan	32.4	31.6	40.6	36.1	29.8	31.8
yes	45.1	43.9	53.1	48.6	45.8	38.6
<i>Competency-based education</i>						
no	65.5	70.2	59.4	58.3	71.4	59.1
currently preparing a plan	27.8	21.1	34.4	33.3	23.2	34.1
yes	6.7	8.8	6.3	8.3	5.4	6.8
When did your institution develop / last update the campus plan for the IT issues listed below? (percentages)						
<i>Overall campus IT plan</i>						
past 12 months	49.4	38.6	56.3	48.6	49.4	54.6
13 to 24 months ago	19.2	21.1	15.6	25.0	19.1	14.8
more than 24 months ago	31.4	40.4	28.1	26.4	31.6	30.7
<i>IT security</i>						
past 12 months	65.0	63.2	75.0	73.6	61.3	62.5
13 to 24 months ago	16.1	15.8	12.5	18.1	18.5	11.4
more than 24 months ago	18.9	21.1	12.5	8.3	20.2	26.1
<i>IT disaster recovery</i>						
past 12 months	54.2	52.6	56.3	65.3	52.4	48.9
13 to 24 months ago	17.5	19.3	25.0	16.7	16.7	15.9
more than 24 months ago	28.3	28.1	18.8	18.1	31.0	35.2
<i>Cloud computing</i>						
past 12 months	60.2	64.9	68.8	62.5	62.5	47.7
13 to 24 months ago	16.6	21.1	12.5	22.2	13.7	15.9
more than 24 months ago	23.3	14.0	18.8	15.3	23.8	36.4
<i>Mobile Computing</i>						
past 12 months	60.2	59.7	56.3	66.7	56.6	63.6
13 to 24 months ago	19.2	19.3	21.9	23.6	17.9	17.1
more than 24 months ago	20.6	21.1	21.9	9.7	25.6	19.3
<i>Identity and access management</i>						
past 12 months	59.2	66.7	78.1	65.3	52.4	55.7
13 to 24 months ago	17.5	14.0	15.6	16.7	19.6	17.1
more than 24 months ago	23.3	19.3	6.3	18.1	28.0	27.3
<i>Disability accessibility / compliance</i>						
past 12 months	42.7	49.1	46.9	50.0	32.7	50.0
13 to 24 months ago	20.1	26.3	21.9	27.8	16.1	17.1
more than 24 months ago	37.2	24.6	31.3	22.2	51.2	33.0
FUTURE ISSUES AFFECTING CAMPUS COMPUTING						
How important are the following to campus computing / information technology environment and IT policy and planning over the next 2-3 years?						
<i>mean score: scale from 1=not important; 7=very important</i>						
<i>Hardware</i>						
Laptop / netbook computers	5.9	6.0	6.0	5.9	6.0	5.6
Smart phones	6.3	6.3	6.4	6.3	6.2	6.1
Tablet devices	6.2	6.1	6.2	6.2	6.1	6.2
Wearable devices	3.8	3.8	4.0	4.0	3.8	3.7

CAMPUS COMPUTING 2015

	All	Universities		MA & BA Colleges		Community Colleges
	Institutions	Public	Private	Public	Private	
How important are the following to campus computing / information technology environment and IT policy and planning over the next 2-3 years?						
<i>Mean score: scale from 1="Not effective" to 7="Very effective".</i>						
<i>Instructional applications and resources</i>						
Developing instructional software	3.9	4.1	4.8	4.1	3.7	3.9
Web-based tutorials	5.7	5.7	5.5	5.7	5.6	5.9
e-Books (e-textbooks)	5.5	5.5	5.5	5.7	5.2	5.8
Open Source / OER textbooks	4.8	5.0	4.5	5.1	4.6	5.1
Online course evaluation	6.0	6.1	6.3	6.0	5.8	6.1
Classroom "clickers" / response system	4.3	5.1	4.7	4.4	4.1	4.1
Student ePortfolios	5.0	5.0	5.3	5.0	5.2	4.4
Audio lecture capture	4.7	4.9	5.5	4.8	4.5	4.5
Video lecture capture	5.3	5.7	6.2	5.5	5.1	5.1
<i>User support services / campus services</i>						
Online IT training	5.8	5.9	5.5	5.9	5.6	5.9
Online technical support	6.0	6.3	6.1	6.3	5.9	6.0
Computer resale program	2.5	2.7	2.6	2.5	2.3	2.7
Alumni services via the campus Web site	4.8	4.5	5.4	4.8	5.2	4.1
<i>Internet / Web issues & resources</i>						
Internet videoconferencing	6.0	6.2	6.2	5.9	5.9	6.1
Live streaming	5.3	5.4	5.4	5.2	5.4	4.8
LTI standards for developing apps	5.2	5.6	5.3	5.2	5.0	5.1
Content management systems	5.9	6.0	6.1	6.1	5.8	5.9
Podcasting	4.1	4.1	4.1	4.0	4.1	4.1
Web conferencing	5.9	6.2	6.2	5.9	5.9	5.9
Server virtualization	6.6	6.7	6.5	6.7	6.5	6.6
Desktop virtualization	5.6	5.8	5.7	5.9	5.3	5.6
Network virtualization	5.1	5.4	4.9	5.2	4.9	5.4
<i>Vendor Services / Outsourcing</i>						
Data back-up / storage	4.6	4.4	5.0	4.7	4.8	4.3
ERP services	3.6	3.4	4.2	3.5	3.5	3.8
Instructional technology services	2.9	2.9	3.2	2.7	2.7	3.3
User support	3.0	2.8	3.3	2.9	2.8	3.2
ResNet services	2.6	2.6	2.9	3.3	2.7	2.0
Network services	2.6	2.2	2.8	2.6	2.7	2.8
eProcurement	2.9	3.1	3.6	3.2	2.5	2.8
Campus portal	2.9	2.7	3.0	2.8	2.9	3.2
Web hosting	4.2	4.0	4.6	4.0	4.5	4.0
Video management	4.3	4.1	4.5	4.0	4.5	4.3
Course development	2.8	2.7	3.2	2.7	2.8	2.7
Online course delivery	3.5	3.5	3.8	3.2	3.4	3.7
RATING THE TECHNOLOGY INFRASTRUCTURE						
<i>percent reporting excellent (6/7); scale score: 1=poor; 7=excellent</i>						
Computer networks and data communication	72.9	68.4	84.4	79.2	70.8	70.5
Emergency communications / notification system(s)	68.1	63.2	81.3	77.8	66.7	61.4
Wireless networks	65.5	63.2	71.9	69.4	66.1	60.2
Online reference resources in campus library / library system	61.6	49.1	68.8	63.9	62.5	63.6
Multimedia / AV enabled classrooms	61.4	54.4	65.6	63.9	60.7	63.6
User support services	56.4	45.6	65.6	61.1	56.5	55.7
Telecommunications and phone system	56.1	52.6	50.0	61.1	52.4	63.6
Enterprise systems	47.5	36.8	46.9	54.2	45.8	52.3
Instructional computing	46.3	42.1	59.4	48.6	42.9	48.9
IT security (network attacks, secure data bases, identity mgmt., etc.)	44.4	47.4	46.9	54.2	39.3	43.2
Cellular coverage across the campus	42.4	35.1	37.5	47.2	50.6	29.5
Web resources to support instruction	41.2	31.6	37.5	40.3	42.3	47.7
Campus web site services / student portal	36.5	33.3	25.0	41.7	35.7	39.8
IT training for faculty	26.9	35.1	31.3	26.4	29.8	14.8
Disaster planning	24.7	29.8	34.4	30.6	21.4	19.3
Data warehousing	20.1	24.6	34.4	22.2	16.1	18.2

CAMPUS COMPUTING 2015

	All Institutions	Universities		MA & BA Colleges		Community Colleges
		Public	Private	Public	Private	
Rating the Technology Infrastructure (continued)						
<i>percent reporting excellent (6/7); scale score: 1=poor; 7=excellent</i>						
IT accessibility: IT resources and services for users with disabilities	18.7	21.1	15.6	26.4	11.3	26.1
Mobile apps / services for students, faculty & staff	17.7	19.3	25.0	19.4	17.3	13.6
Video capture and services / delivery infrastructure	15.8	24.6	31.3	20.8	10.1	11.4
Research computing	13.2	28.1	34.4	6.9	8.3	10.2
Digital dashboards / ERP analytics	11.0	12.3	18.8	12.5	10.1	8.0
IT training for students	10.6	8.8	15.6	15.3	10.1	6.8
Rating the Effectiveness of Your Institution's Investment in Technology Resources and Services						
<i>percent very effective (6 / 7); scale from 1=not effective; 7=very effective</i>						
On-campus teaching and instruction	64.7	52.6	75.0	66.7	67.9	67.0
Library resources and services	62.6	59.6	62.5	72.2	65.5	60.2
Administrative information systems and operations	60.4	52.6	62.5	68.1	62.5	59.1
Instructional support services for faculty	56.8	49.1	62.5	65.3	56.0	58.0
Student recruitment	55.9	52.6	71.9	55.6	67.9	44.3
Academic support services (including advising and retention efforts)	54.0	59.6	46.9	59.7	54.8	50.0
Student services	53.7	57.9	53.1	65.3	50.0	53.4
Online / distance courses and programs	45.8	52.6	40.6	61.1	45.8	67.0
Student success / student completion initiatives	38.4	47.4	37.5	51.4	37.5	38.6
Development efforts	31.4	29.8	34.4	34.7	38.7	26.1
Alumni activities / engagement	30.5	31.6	37.5	37.5	34.5	23.9
Data analysis and managerial analytics	25.9	36.8	25.0	22.2	22.0	35.2
Research and scholarship	25.2	45.6	43.8	31.9	27.4	35.2
ADDRESSING BUDGET ISSUES BY: (percentages)						
<i>Charging fees to departments and service units (networking, printing, etc.)</i>						
Doing this already	30.2	57.9	43.8	36.1	19.6	22.7
Beginning in 2015-16	0.5	-	-	-	0.6	1.1
Reviewing for 2015-16	7.7	14.0	6.3	9.7	4.2	9.1
Decided not to do	61.6	28.1	50.0	54.2	75.6	67.1
<i>Requiring a computer / IT fee for all students</i>						
Doing this already	57.8	75.4	43.8	75.0	39.9	71.6
Beginning in 2015-16	0.7	-	-	1.4	0.6	1.1
Reviewing for 2015-16	4.3	-	3.1	4.2	5.4	5.7
Decided not to do	37.2	24.6	53.1	19.4	54.2	21.6
<i>Regulating the amount of campus bandwidth students can consume</i>						
Doing this already	30.9	24.6	25.0	34.7	33.3	29.6
Beginning in 2015-16	1.0	-	-	-	1.8	1.1
Reviewing for 2015-16	8.6	7.0	12.5	5.6	8.9	10.2
Decided not to do	59.5	68.4	62.5	59.7	56.0	59.1
<i>Reducing hours in public access facilities</i>						
Doing this already	19.2	22.8	9.4	22.2	15.5	25.0
Beginning in 2015-16	2.9	1.8	-	6.9	1.2	4.6
Reviewing for 2015-16	7.7	8.8	15.6	11.1	3.6	9.1
Decided not to do	70.3	66.7	75.0	59.7	79.8	61.4
<i>Reducing services (e.g., less consulting, training)</i>						
Doing this already	25.7	19.3	12.5	31.9	24.4	31.8
Beginning in 2015-16	3.8	5.3	3.1	1.4	3.0	6.8
Reviewing for 2015-16	14.4	22.8	25.0	11.1	12.5	11.4
Decided not to do	56.1	52.6	59.4	55.6	60.1	50.0
<i>Phasing out public computer labs</i>						
Doing this already	14.2	17.5	12.5	18.1	15.5	6.8
Beginning in 2015-16	2.4	-	-	5.6	3.0	1.1
Reviewing for 2015-16	18.2	28.1	21.9	19.4	18.5	9.1
Decided not to do	65.2	54.4	65.6	56.9	63.1	83.0
<i>Reorganizing operations (e.g., combining IT units)</i>						
Doing this already	58.3	66.7	71.9	61.1	56.0	50.0
Beginning in 2015-16	7.0	14.0	6.3	5.6	6.0	5.7
Reviewing for 2015-16	18.9	15.8	15.6	20.8	18.5	21.6
Decided not to do	15.8	3.5	6.3	12.5	19.6	22.7

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	All Institutions	Universities		MA & BA Colleges		Community Colleges
		Public	Private	Public	Private	
Addressing Budget Issues By: (continued) <i>percentages</i>						
<i>Reducing staff</i>						
Doing this already	26.6	28.1	25.0	19.4	23.8	37.5
Beginning in 2015-16	5.8	7.0	-	4.2	4.8	10.2
Reviewing for 2015-16	9.6	19.3	9.4	8.3	6.0	11.4
Decided not to do	58.0	45.6	65.6	68.1	65.5	40.9
<i>Using information technology to reduce instructional costs</i>						
Doing this already	45.3	59.7	43.8	44.4	38.1	51.1
Beginning in 2015-16	2.9	1.8	-	1.4	3.6	4.6
Reviewing for 2015-16	22.5	21.1	18.8	29.2	22.6	19.3
Decided not to do	29.3	17.5	37.5	25.0	35.7	25.0
<i>Making greater use of student assistants for user support needs</i>						
Doing this already	80.3	89.5	71.9	83.3	82.7	70.5
Beginning in 2015-16	2.6	-	-	-	3.6	5.7
Reviewing for 2015-16	7.0	3.5	12.5	9.7	5.4	8.0
Decided not to do	10.1	7.0	15.6	6.9	8.3	15.9
<i>Outsourcing computing / IT services</i>						
Doing this already	32.4	33.3	40.6	30.6	33.9	27.3
Beginning in 2015-16	2.6	3.5	3.1	5.6	1.2	2.3
Reviewing for 2015-16	14.9	26.3	18.8	16.7	8.9	15.9
Decided not to do	50.1	36.8	37.5	47.2	56.0	54.6
<i>Outsourcing student portal service</i>						
Doing this already	8.9	10.5	6.3	9.7	8.9	8.0
Beginning in 2015-16	2.2	-	3.1	2.8	1.2	4.6
Reviewing for 2015-16	8.2	7.0	12.5	11.1	6.0	9.1
Decided not to do	80.8	82.5	78.1	76.4	83.9	78.4
<i>Outsourcing user support / help desk services</i>						
Doing this already	11.5	12.3	21.9	11.1	5.4	19.3
Beginning in 2015-16	1.9	1.8	-	1.4	1.2	4.6
Reviewing for 2015-16	13.2	10.5	6.3	15.3	12.5	17.1
Decided not to do	73.4	75.4	71.9	72.2	81.0	59.1
<i>Outsourcing ResNet services</i>						
Doing this already	8.9	5.3	3.1	15.3	8.9	8.0
Beginning in 2015-16	0.7	-	-	1.4	-	2.3
Reviewing for 2015-16	7.7	8.8	12.5	5.6	7.7	6.8
Decided not to do	82.7	86.0	84.4	77.8	83.3	83.0
<i>Delaying / deferring ERP deployment / replacement / upgrades</i>						
Doing this already	18.9	19.3	18.8	19.4	19.6	17.1
Beginning in 2015-16	2.6	5.3	-	5.6	-	4.6
Reviewing for 2015-16	8.9	12.3	12.5	8.3	7.7	8.0
Decided not to do	69.5	63.2	68.8	66.7	72.6	70.5
<i>Deferring / reducing use of consultants on IT projects</i>						
Doing this already	42.5	42.1	31.3	48.6	42.9	40.9
Beginning in 2015-16	3.4	5.3	6.3	1.4	3.0	3.4
Reviewing for 2015-16	14.6	15.8	25.0	15.3	11.3	15.9
Decided not to do	39.6	36.8	37.5	34.7	42.9	39.8
<i>Reviewing options for the campus standard Learning Management System</i>						
Doing this already	34.5	40.4	31.3	38.9	33.9	29.6
Beginning in 2015-16	5.3	3.5	6.3	1.4	7.1	5.7
Reviewing for 2015-16	21.8	22.8	25.0	31.9	16.7	21.6
Decided not to do	38.4	33.3	37.5	27.8	42.3	43.2
<i>Migrating to Software as a Service (SaaS) / Cloud-based ERP applications</i>						
Doing this already	18.9	21.1	25.0	23.6	17.9	13.6
Beginning in 2015-16	6.0	7.0	6.3	4.2	4.8	9.1
Reviewing for 2015-16	29.3	42.1	34.4	25.0	28.6	23.9
Decided not to do	45.8	29.8	34.4	47.2	48.8	53.4

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	All	Universities		MA & BA Colleges		Community Colleges
	Institutions	Public	Private	Public	Private	
STRATEGIC, BUDGET AND PERSONNEL ISSUES						
<i>percent reporting very important (6/7); scale: 1=not important; 7=very important</i>						
Helping our IT personnel stay current with new technologies	88.0	80.7	93.8	93.1	85.1	92.0
Identity Management	81.5	94.7	84.4	84.7	76.2	79.5
IT business continuity	77.5	86.0	71.9	79.2	73.2	80.7
Storage management	71.9	89.5	71.9	77.8	64.9	69.3
Assessing the benefits of existing investments in computing and technology	71.7	82.5	81.3	70.8	68.5	68.2
Business analytics / intelligence	70.7	84.2	75.0	83.3	66.1	59.1
Surveying students and faculty about IT issues and services	67.1	68.4	56.3	63.9	65.5	76.1
Moving more of our user support services to the Web	66.7	71.9	68.8	70.8	58.9	73.9
Assessing the return on investment for IT spending / resources	64.7	71.9	56.3	68.1	61.3	67.0
Data warehousing	58.8	68.4	62.5	75.0	48.8	56.8
Using predictive analytics to support success initiatives	55.6	66.7	53.1	51.4	48.8	65.9
Researching the total cost of ownership (TCO) for our IT purchases	54.4	57.9	56.3	51.4	51.2	60.2
Hosted applications / Software as a Service (SaaS)	54.4	70.2	62.5	47.2	53.6	48.9
Implementing Federated Identity Management	53.7	78.9	65.6	59.7	42.3	50.0
Operating with a single student user profile for all institutional applications	47.5	57.9	43.8	40.3	44.0	54.5
Managing / distributing digital learning resources	46.5	50.9	46.9	54.2	40.5	48.9
Managing campus video resources (lectures, presentation, etc.)	43.9	47.4	62.5	54.2	38.1	37.5
Developing / updating campus policies for Web-based intellectual property	38.6	45.6	43.8	41.7	34.5	37.5
Sharing digital resources with other campuses / institutions	37.4	45.6	34.4	45.8	32.1	36.4
Controlling / restricting file sharing of commercial content (music, media, etc.)	37.4	35.1	28.1	41.7	35.1	43.2
Providing incentives and rewards for faculty to support technology integration into the curriculum	31.4	21.1	31.3	41.7	34.5	23.9
Implementing new technology tools in our continuing ed and workforce development programs	29.3	21.1	31.3	30.6	24.4	42.0
Negotiating site licensing agreements with academic publishers	28.3	33.3	18.8	33.3	22.6	35.2
Using social media to support student success initiatives	28.1	26.3	21.9	36.1	23.2	34.1
Using Open Source tools and applications	27.3	29.8	31.3	29.2	26.8	23.9
Negotiating site licensing agreements with textbook publishers	24.9	29.8	15.6	29.2	18.5	34.1
Migrating administrative / ERP services to the Cloud	23.3	28.1	31.3	23.6	21.4	20.5
Promoting the use of Open Education Resource (OER) course materials	17.7	17.5	6.3	20.8	13.1	28.4
Percentage of colleges and universities currently provide these technology-based resources and services for students, faculty, and staff						
Email accounts for faculty, staff and administrators	100.0	100.0	100.0	100.0	100.0	100.0
Email accounts for students	98.6	100.0	100.0	100.0	100.0	93.2
Public computer labs	93.8	94.6	96.9	88.9	95.8	92.0
Video lecture capture	73.3	89.3	100.0	86.1	58.3	71.6
Email services for alumni (accounts or forwarding)	72.6	83.9	90.6	72.2	77.4	50.0
IT help desk services on evenings and weekends	69.7	75.0	87.5	76.4	69.6	54.5
Audio lecture capture	67.1	83.9	93.8	73.6	54.8	64.8
Free (paper) printing services for students	66.8	55.4	65.6	59.7	76.8	61.4
ePortfolio services for students	54.8	48.2	71.9	61.1	66.7	25.0
3D printing for students	49.5	64.3	62.5	47.2	45.2	45.5
On-site computer repair services for students	41.1	57.1	56.3	38.9	50.6	9.1
ePortfolio services for faculty and staff	34.4	35.7	53.1	30.6	39.9	19.3
Computer resale program	24.0	41.1	31.3	19.4	23.2	15.9
Percentage of survey participants who agree/strongly agree colleges and universities should provide these technology-based resources and services for students, faculty, and staff						
Email accounts for faculty, staff and administrators	99.3	100.0	100.0	97.2	100.0	98.9
Email accounts for students	92.8	93.0	96.9	91.7	94.6	88.6
Public computer labs	88.0	89.5	81.3	87.5	89.3	87.5
Video lecture capture	92.6	100.0	100.0	97.2	88.7	88.6
Email services for alumni (accounts or forwarding)	70.0	80.7	84.4	72.2	70.8	54.5
IT help desk services on evenings and weekends	91.1	94.7	96.9	98.6	86.9	88.6
Audio lecture capture	84.9	93.0	90.6	88.9	79.8	84.1
Free (paper) printing services for students	58.8	47.4	65.6	55.6	64.9	54.5
ePortfolio services for students	83.5	87.7	87.5	86.1	86.9	70.5
3D printing for students	69.5	73.7	84.4	73.6	67.3	62.5
On-site computer repair services for students	50.8	57.9	65.6	55.6	55.4	28.4
ePortfolio services for faculty and staff	69.5	71.9	81.3	77.8	68.5	59.1
Computer resale program	26.4	38.6	34.4	25.0	19.6	29.5

CAMPUS COMPUTING 2015

	All	Universities		MA & BA Colleges		Community Colleges
	Institutions	Public	Private	Public	Private	
At campuses where these services are provided, the percentage of survey participants who agree/strongly agree that their campus should provide these technology-based resources and services for students, faculty, and staff						
Email accounts for faculty, staff and administrators	99.3	100.0	100.0	97.2	100.0	98.9
Email accounts for students	93.4	92.9	96.9	91.7	94.6	91.5
Public computer labs	92.3	94.3	83.9	96.9	91.9	91.4
Video lecture capture	100.0	100.0	100.0	100.0	100.0	100.0
Email services for alumni (accounts or forwarding)	82.5	93.6	89.7	84.6	78.5	75.0
IT help desk services on evenings and weekends	98.6	100.0	100.0	98.2	97.4	100.0
Audio lecture capture	97.8	97.9	93.3	98.1	97.8	100.0
Free (paper) printing services for students	77.3	64.5	85.7	79.1	78.3	77.8
ePortfolio services for students	96.5	96.3	100.0	95.5	95.5	100.0
3D printing for students	92.2	86.1	100.0	97.1	89.5	95.0
On-site computer repair services for students	86.0	81.3	88.9	92.9	85.9	75.0
ePortfolio services for faculty and staff	94.4	100.0	100.0	95.5	89.6	100.0
Computer resale program	77.0	78.3	90.0	92.9	59.0	100.0
THIS YEAR'S COMPUTING BUDGET COMPARED TO LAST YEAR'S BUDGET (percentages)						
<i>Total computing budget for central IT services</i>						
Reduced >5%	10.6	5.3	-	6.9	14.3	13.6
Reduced 4-5%	6.0	7.0	9.4	12.5	2.4	5.7
Reduced 1-3%	12.7	22.8	18.8	11.1	7.1	15.9
No change	34.3	29.8	18.8	34.7	33.3	44.3
Increased 1-3%	27.1	29.8	43.8	25.0	32.1	11.4
Increased 4-5%	4.1	-	6.3	5.6	4.8	3.4
Increased >5%	5.3	5.3	3.1	4.2	6.0	5.7
<i>Computer purchases by academic departments</i>						
Reduced >5%	7.4	3.5	-	8.3	7.1	12.5
Reduced 4-5%	5.0	8.8	3.1	8.3	3.6	3.4
Reduced 1-3%	10.8	14.0	12.5	12.5	6.6	14.8
No change	63.6	57.9	65.6	56.9	70.8	58.0
Increased 1-3%	11.3	15.8	18.8	12.5	10.1	6.8
Increased 4-5%	1.4	-	-	1.4	1.2	3.4
Increased >5%	0.5	-	-	-	0.6	1.1
<i>All institutional purchases of desktop / notebook computers</i>						
Reduced >5%	7.2	1.8	-	6.9	8.3	11.4
Reduced 4-5%	4.6	8.8	6.3	6.9	3.0	2.3
Reduced 1-3%	13.4	17.5	15.6	11.1	10.1	18.2
No change	57.8	59.7	62.5	59.7	58.3	52.3
Increased 1-3%	13.7	10.5	15.6	15.3	16.7	8.0
Increased 4-5%	2.2	1.8	-	-	2.4	4.6
Increased >5%	1.2	-	-	-	1.2	3.4
<i>Institutional support for public computer labs</i>						
Reduced >5%	5.3	5.3	3.1	4.2	6.6	4.6
Reduced 4-5%	4.6	1.8	6.3	6.9	4.2	4.6
Reduced 1-3%	13.7	26.3	9.4	13.9	12.5	9.1
No change	67.4	59.7	68.8	59.7	69.6	73.9
Increased 1-3%	7.9	7.0	9.4	12.5	6.6	6.8
Increased 4-5%	0.5	-	-	-	0.6	1.1
Increased >5%	0.7	-	3.1	2.8	-	-
<i>Network servers</i>						
Reduced >5%	3.6	1.8	-	1.4	5.4	4.6
Reduced 4-5%	3.6	3.5	3.1	4.2	1.8	6.8
Reduced 1-3%	9.1	14.0	9.4	8.3	7.7	9.1
No change	60.0	56.1	65.6	51.4	60.1	67.1
Increased 1-3%	16.3	14.0	15.6	22.2	19.1	8.0
Increased 4-5%	2.9	1.8	-	5.6	3.6	1.1
Increased >5%	4.6	8.8	6.3	6.9	2.4	3.4

CAMPUS COMPUTING 2015

	All	Universities		MA & BA Colleges		Community Colleges
	Institutions	Public	Private	Public	Private	
This Year's Computing Budget Compared to Last Year's Budget (continued)						
<i>Server software and related products</i>						
Reduced >5%	2.9	1.8	-	1.4	4.2	3.4
Reduced 4-5%	2.4	1.8	3.1	2.8	1.2	4.6
Reduced 1-3%	6.5	14.0	3.1	5.6	5.4	5.7
No change	58.0	40.4	65.6	59.7	60.1	61.4
Increased 1-3%	24.5	36.8	21.9	25.0	24.4	17.1
Increased 4-5%	3.1	1.8	3.1	2.8	2.4	5.7
Increased >5%	2.6	3.5	3.1	2.8	2.4	2.3
<i>Wireless networks</i>						
Reduced >5%	2.6	-	-	2.8	3.6	3.4
Reduced 4-5%	0.5	-	-	-	0.6	1.1
Reduced 1-3%	2.4	3.5	-	4.2	1.8	2.3
No change	43.9	36.8	37.5	37.5	47.0	50.0
Increased 1-3%	27.6	29.8	34.4	30.6	26.2	23.9
Increased 4-5%	11.5	19.3	12.5	12.5	8.9	10.2
Increased >5%	11.5	10.5	15.6	12.5	11.9	9.1
<i>User training and support</i>						
Reduced >5%	3.6	1.8	-	4.2	3.6	5.7
Reduced 4-5%	1.4	-	-	2.8	1.8	1.1
Reduced 1-3%	7.0	14.0	-	6.9	5.4	8.0
No change	69.5	73.7	90.6	61.1	68.5	68.2
Increased 1-3%	14.6	7.0	6.3	22.2	16.1	13.6
Increased 4-5%	2.6	3.5	-	1.4	4.2	1.1
Increased >5%	1.2	-	3.1	1.4	0.6	2.3
<i>Professional development for IT personnel</i>						
Reduced >5%	5.3	1.8	-	2.8	8.3	5.7
Reduced 4-5%	5.3	7.0	3.1	5.6	3.6	8.0
Reduced 1-3%	8.9	17.5	9.4	11.1	6.0	6.8
No change	58.3	45.6	68.8	45.8	66.1	58.0
Increased 1-3%	17.0	22.8	9.4	29.2	11.3	17.1
Increased 4-5%	3.4	3.5	6.3	4.2	3.6	1.1
Increased >5%	1.9	1.8	3.1	1.4	1.2	3.4
<i>Campus portal services</i>						
Reduced >5%	2.6	3.5	-	2.8	3.0	2.3
Reduced 4-5%	1.4	1.8	-	4.2	-	2.3
Reduced 1-3%	6.2	5.3	6.3	8.3	5.4	6.8
No change	74.1	79.0	84.4	69.4	75.0	69.3
Increased 1-3%	8.6	8.8	9.4	8.3	8.3	9.1
Increased 4-5%	4.3	1.8	-	4.2	6.0	4.6
Increased >5%	2.6	-	-	2.8	2.4	5.7
<i>ERP software and services</i>						
Reduced >5%	1.4	-	-	1.4	1.8	2.3
Reduced 4-5%	1.2	-	-	2.8	0.6	2.3
Reduced 1-3%	2.2	1.8	3.1	4.2	0.6	3.4
No change	54.0	54.4	53.1	62.5	48.8	56.8
Increased 1-3%	22.3	29.8	25.0	18.1	22.6	19.3
Increased 4-5%	10.6	7.0	6.3	5.6	15.5	9.1
Increased >5%	8.4	7.0	12.5	5.6	10.1	6.8
<i>Cloud computing resources / services / migration</i>						
Reduced >5%	1.9	-	-	1.4	2.4	3.4
Reduced 4-5%	0.7	1.8	-	1.4	-	1.1
Reduced 1-3%	1.7	1.8	-	2.8	1.2	2.3
No change	57.3	49.1	46.9	50.0	59.5	68.2
Increased 1-3%	22.8	24.6	40.6	26.4	21.4	14.8
Increased 4-5%	10.1	19.3	6.3	9.7	9.5	6.8
Increased >5%	5.5	3.5	6.3	8.3	6.0	3.4

CAMPUS COMPUTING 2015

	All	Universities		MA & BA Colleges		Community Colleges
	Institutions	Public	Private	Public	Private	
This Year's Computing Budget Compared to Last Year's Budget (continued)						
<i>Mobile computing resources / services</i>						
Reduced >5%	1.7	-	-	1.4	1.8	3.4
Reduced 4-5%	0.5	-	-	1.4	-	1.1
Reduced 1-3%	2.4	3.5	-	2.8	2.4	2.3
No change	61.2	50.9	50.0	55.6	71.4	56.8
Increased 1-3%	24.9	33.3	34.4	25.0	18.5	28.4
Increased 4-5%	6.2	8.8	12.5	9.7	3.0	5.7
Increased >5%	3.1	3.5	3.1	4.2	3.0	2.3
<i>External service providers</i>						
Reduced >5%	4.3	1.8	-	2.8	6.0	5.7
Reduced 4-5%	1.9	3.5	-	1.4	1.2	3.4
Reduced 1-3%	7.2	14.0	-	9.7	6.0	5.7
No change	62.6	43.9	65.6	69.4	64.9	63.6
Increased 1-3%	17.5	31.6	25.0	6.9	15.5	18.2
Increased 4-5%	4.1	3.5	6.3	4.2	4.2	3.4
Increased >5%	2.4	1.8	3.1	5.6	2.4	-
<i>Security issues</i>						
Reduced >5%	1.9	-	-	2.8	1.8	3.4
Reduced 4-5%	0.2	-	-	1.4	-	-
Reduced 1-3%	1.7	1.8	-	2.8	1.2	2.3
No change	47.0	33.3	25.0	36.1	55.4	56.8
Increased 1-3%	28.8	24.6	40.6	36.1	26.8	25.0
Increased 4-5%	11.3	17.5	18.8	9.7	8.9	10.2
Increased >5%	9.1	22.8	15.6	11.1	6.0	2.3
<i>Identity management</i>						
Reduced >5%	2.4	-	-	2.8	3.0	3.4
Reduced 4-5%	0.5	-	-	1.4	-	1.1
Reduced 1-3%	1.4	3.5	-	2.8	0.6	1.1
No change	62.1	45.6	46.9	52.8	70.8	69.3
Increased 1-3%	21.6	26.3	40.6	25.0	17.3	17.1
Increased 4-5%	6.5	10.5	3.1	9.7	5.4	4.6
Increased >5%	5.5	14.0	9.4	5.6	3.0	3.4
<i>Consultants for IT projects and services</i>						
Reduced >5%	7.0	3.5	3.1	2.8	10.7	6.8
Reduced 4-5%	3.6	1.8	3.1	4.2	5.4	1.1
Reduced 1-3%	14.4	22.8	31.3	18.1	8.3	11.4
No change	50.6	49.1	43.8	52.8	50.0	53.4
Increased 1-3%	14.6	12.3	15.6	11.1	15.5	17.1
Increased 4-5%	5.5	7.0	-	4.2	5.4	8.0
Increased >5%	4.3	3.5	3.1	6.9	4.8	2.3
<i>Data warehousing</i>						
Reduced >5%	1.4	-	-	1.4	1.8	2.3
Reduced 4-5%	1.0	-	-	-	1.8	1.1
Reduced 1-3%	2.6	1.8	3.1	4.2	3.0	1.1
No change	71.5	68.4	59.4	59.7	78.0	75.0
Increased 1-3%	14.2	19.3	28.1	16.7	9.5	12.5
Increased 4-5%	5.5	5.3	6.3	13.9	3.0	3.4
Increased >5%	3.8	5.3	3.1	4.2	3.0	4.6
<i>CRM services / software</i>						
Reduced >5%	2.2	-	-	1.4	3.0	3.4
Reduced 4-5%	1.2	3.5	-	1.4	-	2.3
Reduced 1-3%	2.4	5.3	6.3	1.4	1.2	2.3
No change	67.9	66.7	65.6	62.5	69.1	71.6
Increased 1-3%	16.1	10.5	28.1	22.2	14.9	12.5
Increased 4-5%	4.3	7.0	-	2.8	5.4	3.4
Increased >5%	6.0	7.0	-	8.3	6.6	4.6

CAMPUS COMPUTING 2015

	All Institutions	Universities		MA & BA Colleges		Community Colleges
		Public	Private	Public	Private	
This Year's Computing Budget Compared to Last Year's Budget (continued)						
<i>Supporting Open Source projects / applications</i>						
Reduced >5%	3.6	3.5	-	2.8	4.2	4.6
Reduced 4-5%	3.4	5.3	3.1	2.8	3.0	3.4
Reduced 1-3%	3.4	7.0	-	4.2	3.6	1.1
No change	80.1	70.2	87.5	84.7	79.8	80.7
Increased 1-3%	7.7	14.0	9.4	4.2	7.1	6.8
Increased 4-5%	1.2	-	-	1.4	0.6	3.4
Increased >5%	0.7	-	-	-	1.8	-
<i>Business Continuity</i>						
Reduced >5%	2.2	-	-	1.4	2.4	4.6
Reduced 4-5%	0.7	-	-	1.4	-	2.3
Reduced 1-3%	2.6	8.8	3.1	5.6	0.6	-
No change	70.5	61.4	62.5	66.7	76.2	71.6
Increased 1-3%	16.6	19.3	28.1	20.8	12.5	14.8
Increased 4-5%	3.8	3.5	6.3	1.4	4.8	3.4
Increased >5%	3.6	7.0	-	2.8	3.6	3.4
<i>Business analytics / Business Intelligence products</i>						
Reduced >5%	2.2	-	-	1.4	2.4	4.6
Reduced 4-5%	1.0	-	-	1.4	0.6	2.3
Reduced 1-3%	2.9	7.0	-	1.4	3.6	1.1
No change	58.8	42.1	59.4	51.4	62.5	68.2
Increased 1-3%	19.9	28.1	28.1	27.8	16.7	11.4
Increased 4-5%	8.9	12.3	9.4	11.1	7.1	8.0
Increased >5%	6.5	10.5	3.1	5.6	7.1	4.6
<i>Emergency communication / notification services</i>						
Reduced >5%	1.4	-	-	1.4	1.8	2.3
Reduced 4-5%	0.5	-	-	-	-	2.3
Reduced 1-3%	1.9	5.3	-	2.8	1.2	1.1
No change	80.6	77.2	81.3	79.2	85.1	75.0
Increased 1-3%	11.3	14.0	15.6	9.7	8.9	13.6
Increased 4-5%	2.9	3.5	3.1	5.6	1.2	3.4
Increased >5%	1.4	-	-	1.4	1.8	2.3
<i>Media management (capture, cataloging, archiving, etc.)</i>						
Reduced >5%	2.4	1.8	-	1.4	2.4	4.6
Reduced 4-5%	1.4	-	3.1	1.4	1.8	1.1
Reduced 1-3%	3.1	5.3	-	5.6	2.4	2.3
No change	64.8	59.7	50.0	59.7	64.9	77.3
Increased 1-3%	20.4	31.6	37.5	19.4	19.6	9.1
Increased 4-5%	5.5	1.8	6.3	6.9	6.0	5.7
Increased >5%	2.4	-	3.1	5.6	3.0	-
THE TECHNOLOGY BUDGET						
Percentage of campuses experiencing a mid-year cut in the computing budget, 2014-15	22.6	14.0	25.0	15.3	24.6	29.5
Percentage of budget that was cut	2.6	1.4	1.0	1.9	3.1	3.7
Average central IT services budget for 2015-16	\$ 8,800,362	\$ 25,915,243	\$ 23,943,441	\$ 6,246,996	\$ 3,745,647	\$ 4,061,680
Percentage of the Central IT budget allocated to:						
Hardware	16.6	12.2	14.1	14.7	19.3	16.9
Software	15.2	12.7	11.8	13.3	17.3	15.8
Personnel	52.3	57.8	56.4	58.7	45.8	54.6
Content licenses	6.0	4.1	4.5	5.3	6.9	6.6
User support	14.0	13.8	14.5	14.7	13.9	13.7
Network service / support	13.8	16.4	14.1	11.4	14.8	12.3
<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	65.8	50.0	65.2	59.0	74.0	65.8
Total institutional computing / IT expenditures as an estimated percentage of the total institutional budget	6.3	4.6	4.8	5.7	6.3	8.3

CAMPUS COMPUTING 2015

	All	Universities		MA & BA Colleges		Community Colleges
	Institutions	Public	Private	Public	Private	
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 2014-15:						
Alumni / Advancement / Development	\$ 49,539	\$ 140,558	\$ 100,991	\$ 31,452	\$ 34,315	\$ 11,369
Business Intelligence / Big Data analytics	\$ 75,130	\$ 208,039	\$ 69,599	\$ 88,885	\$ 26,227	\$ 43,855
CRM	\$ 62,673	\$ 106,026	\$ 117,641	\$ 42,729	\$ 55,833	\$ 40,965
Finance / Accounting	\$ 159,775	\$ 393,032	\$ 519,419	\$ 99,457	\$ 56,722	\$ 73,423
ePortfolio services	\$ 14,703	\$ 23,585	\$ 44,134	\$ 8,191	\$ 10,507	\$ 7,672
Grants and Research Management	\$ 53,020	\$ 178,188	\$ 84,183	\$ 23,459	\$ 4,473	\$ 6,310
Learning management systems	\$ 128,411	\$ 276,769	\$ 174,137	\$ 125,492	\$ 78,290	\$ 94,778
Lecture capture and campus video management	\$ 45,418	\$ 150,060	\$ 47,242	\$ 31,515	\$ 18,851	\$ 17,793
Library system management	\$ 77,703	\$ 245,813	\$ 80,196	\$ 60,099	\$ 48,977	\$ 31,923
Human resources (recruitment)	\$ 33,204	\$ 84,239	\$ 38,326	\$ 35,957	\$ 16,711	\$ 18,528
Human resources (HR records and payroll)	\$ 130,101	\$ 532,910	\$ 227,233	\$ 41,067	\$ 35,969	\$ 42,042
Student information system	\$ 219,449	\$ 619,727	\$ 308,038	\$ 150,384	\$ 112,957	\$ 154,634
Current replacement cycle for institutionally-owned desktop / notebook computers (percentages)						
<i>Student labs</i>						
1 year	-	-	-	-	-	-
2 years	1.7	-	3.1	1.4	2.4	1.1
3 years	28.9	25.0	46.9	16.7	33.3	26.1
4 years	47.8	53.6	46.9	50.0	51.2	36.4
5 years	21.6	21.4	3.1	31.9	13.1	36.4
<i>Faculty offices</i>						
1 year	-	-	-	-	-	-
2 years	0.5	-	-	1.4	0.6	-
3 years	16.6	16.1	28.1	16.7	19.6	6.8
4 years	51.0	51.8	56.3	44.4	58.9	38.6
5 years	32.0	32.1	15.6	37.5	20.8	54.6
<i>Administrative offices</i>						
1 year	-	-	-	-	-	-
2 years	0.2	-	-	-	0.6	-
3 years	11.5	10.7	9.4	5.6	17.3	6.8
4 years	52.6	57.1	78.1	47.2	56.6	37.5
5 years	35.6	32.1	12.5	47.2	25.6	55.7
Replacement cycle for institutionally-owned tablets (percentages)						
<i>Student labs</i>						
1 year	-	-	-	-	-	-
2 years	4.3	1.8	6.3	5.6	6.0	1.1
3 years	31.6	42.1	40.6	34.7	26.5	28.4
4 years	29.2	26.3	31.3	29.2	30.1	28.4
5 years	34.9	29.8	21.9	30.6	37.4	42.1
<i>Faculty offices</i>						
1 year	-	-	-	-	-	-
2 years	3.6	-	6.3	2.8	6.6	-
3 years	29.4	40.4	37.5	30.6	24.1	28.4
4 years	32.5	24.6	40.6	31.9	34.9	30.7
5 years	34.5	35.1	15.6	34.7	34.3	40.9
<i>Administrative offices</i>						
1 year	-	-	-	-	-	-
2 years	3.4	1.8	9.4	1.4	5.4	-
3 years	28.4	35.1	28.1	30.6	25.9	27.3
4 years	32.8	29.8	46.9	31.9	32.5	30.7
5 years	35.4	33.3	15.6	36.1	36.1	42.1
Does your institution have a financial plan to upgrade / enhance / replace the campus network (including wireless network?) (percentages)						
No current plan / policy	5.5	3.5	6.3	5.6	4.2	9.1
Under discussion / development	23.0	28.1	9.4	27.8	23.2	20.5
Currently funded network replacement / upgrade plan	71.5	68.4	84.4	66.7	72.6	70.5

CAMPUS COMPUTING 2015

	All Institutions	Universities		MA & BA Colleges		Community Colleges
		Public	Private	Public	Private	
As of September 2015, will your institution have an operational campus-wide (emergency) notification system? (percentages)						
No	1.4	-	-	1.4	1.8	2.3
Yes	98.6	100.0	100.0	98.6	98.2	97.7
As of September 2015, will your institution use a third party provider for notification software or services?						
No	3.7	1.8	-	8.5	2.4	4.7
If yes, indicate the name of the company that your campus uses for notification services:						
3n / Everbridge	3.1	3.6	6.5	3.1	2.5	2.5
Blackboard Connect	29.2	26.8	38.7	29.2	28.0	29.6
CampusCruiser	0.3	-	-	-	0.6	-
E2Campus	17.3	10.7	6.5	12.3	21.7	21.0
MIR3	0.8	1.8	3.2	1.5	-	-
Rave Mobile	32.0	35.7	29.0	38.5	30.4	28.4
SchoolMessenger	0.8	-	-	-	1.2	1.2
Send Word Now	2.5	3.6	9.7	3.1	0.6	2.5
Swiftreach Networks	-	-	-	-	-	-
Other	14.2	17.9	6.5	12.3	14.9	14.8
Over the past year (2014-15), did you activate your notification service?						
No	18.0	16.1	19.4	13.8	21.7	14.6
If yes, for what purpose did you activate your notification service?						
Emergency notification	83.0	91.5	68.0	83.9	82.5	82.9
Student recruitment (contacting prospective students)	5.6	4.3	-	-	4.8	14.3
Severe weather alerts	82.4	91.5	76.0	76.8	84.1	80.0
Student services (academic services for current students)	12.0	12.8	4.0	3.6	5.6	32.9
Alumni contact / services	0.9	2.1	-	-	0.8	1.4
Other	18.2	25.5	28.0	17.9	13.5	18.6
WEB AND NETWORKING ISSUES						
How important are the following issues on your campus?						
<i>means: scale from 1="not important" to 7="very important".</i>						
Network security	6.5	6.7	6.6	6.7	6.4	6.5
Disaster recovery	6.0	5.9	5.9	6.3	5.9	5.9
Replacement cycle for network infrastructure	5.9	6.3	5.9	6.0	5.7	5.9
Identity management	5.9	6.2	6.1	6.2	5.6	5.9
Data encryption	5.7	5.9	5.9	6.0	5.5	5.5
IT Disaster Communications Capacity	5.6	5.8	5.6	5.9	5.4	5.6
Video / rich media streaming	5.5	5.7	5.9	5.5	5.6	5.2
Cloud computing	5.5	5.7	5.9	5.7	5.4	5.2
VoIP	5.5	5.9	5.5	5.7	5.3	5.8
BYOD (Bring your own device) support	5.5	5.6	5.2	5.7	5.4	5.6
Virtual private networks (VPN)	5.3	5.7	5.5	5.5	5.1	5.1
100Gb Ethernet	5.1	6.2	5.4	5.4	4.7	4.6
Guest access / services on the campus network	5.1	5.5	5.4	5.3	5.0	4.9
Digital image libraries / archives	4.8	4.8	5.1	4.9	4.8	4.6
Bandwidth for Software as a Service / SaaS applications	4.8	4.9	5.2	5.0	4.7	4.5
Bandwidth for student entertainment (Netflix, YouTube, gaming, etc.)	4.7	4.8	4.8	4.8	5.3	3.6
Digital privacy	4.7	5.2	4.9	5.0	4.6	4.2
Collaborative agreements with other institutions and community agencies	4.5	5.0	3.9	4.8	4.1	4.7
The Internet of Things	4.1	4.9	3.9	4.3	4.0	3.8
Large data sets and 3D modeling / file sharing	3.8	5.0	4.8	3.9	3.5	3.2
Internet2	3.7	5.7	4.9	4.2	3.0	2.9
Net+ services from Internet2	3.2	4.9	4.0	3.8	2.6	2.6
Statenets / Statenet services	3.0	4.3	3.0	3.4	2.5	2.9
Does your institution charge students for printing? (percentages)						
No	20.6	7.0	-	13.9	31.6	21.6
Annual / term fee for all printing	1.7	1.8	-	5.6	0.6	1.1
Annual / term fee for specific number of pages	16.1	17.5	9.4	18.1	19.6	9.1
Pay for use / individual page charges	41.7	61.4	56.3	56.9	21.4	50.0
Other payment plan for printing services	19.9	12.3	34.4	5.6	26.8	18.2

CAMPUS COMPUTING 2015

	All Institutions	Universities		MA & BA Colleges		Community Colleges
		Public	Private	Public	Private	
Is your institution reviewing or converting to Cloud Services for the following applications: (percentages)						
<i>Calendaring</i>						
No	25.2	15.8	18.8	22.5	23.2	39.8
Under review	20.4	28.1	18.8	23.9	16.7	20.5
Converting to / now using	54.3	56.1	62.5	53.5	60.1	39.8
<i>Administrative computing / ERP services</i>						
No	57.9	49.1	53.1	46.5	63.7	63.6
Under review	29.8	47.4	25.0	36.6	25.6	22.7
Converting to / now using	12.3	3.5	21.9	16.9	10.7	13.6
<i>CRM services</i>						
No	41.4	42.1	34.4	36.6	33.9	61.4
Under review	25.2	36.8	34.4	25.4	22.0	20.5
Converting to / now using	33.4	21.1	31.3	38.0	44.1	18.2
<i>Learning management systems / LMS services</i>						
No	26.2	22.8	21.9	22.5	29.2	27.3
Under review	21.6	40.4	25.0	14.1	22.0	13.6
Converting to / now using	52.2	36.8	53.1	63.4	48.8	59.1
<i>Research and HPC activities</i>						
No	68.8	47.4	43.8	60.6	72.6	90.9
Under review	22.8	45.6	37.5	31.0	17.9	5.7
Converting to / now using	8.4	7.0	18.8	8.5	9.5	3.4
<i>Storage / archiving / business continuity</i>						
No	25.7	24.6	9.4	16.9	25.0	40.9
Under review	53.9	68.4	56.3	54.9	50.6	48.9
Converting to / now using	20.4	7.0	34.4	28.2	24.4	10.2
<i>Document management</i>						
No	47.4	49.1	50.0	38.0	51.2	45.5
Under review	36.1	33.3	31.3	42.3	36.9	33.0
Converting to / now using	16.6	17.5	18.8	19.7	11.9	21.6
Is your institution reviewing or converting to outsourced / hosted applications:						
<i>Hosted / outsourced email</i>						
Students						
No	5.0	1.8	3.1	5.6	4.2	9.1
Under review	9.1	5.3	15.6	4.2	13.1	5.7
Converting to / now using	85.9	93.0	81.3	90.3	82.7	85.2
Faculty						
No	21.3	14.0	28.1	22.2	15.5	34.1
Under review	23.5	26.3	12.5	25.0	22.0	27.3
Converting to / now using	55.2	59.7	59.4	52.8	62.5	38.6
Provider						
Google	47.3	51.8	55.2	49.3	51.9	30.9
Microsoft	52.4	46.4	44.8	50.7	48.1	69.1
Zimbra	0.3	1.8	-	-	-	-
<i>Hosted / outsourced "office" applications</i>						
No	17.6	10.5	9.4	18.1	15.5	28.7
Under review	28.4	22.8	28.1	27.8	29.2	31.0
Converting to / now using	54.1	66.7	62.5	54.2	55.4	40.2
Percent now reviewing:						
Google Apps / Docs for education	11.5	8.3	-	-	17.0	15.4
Microsoft Live @ EDU / Office 365 for education	88.5	91.7	100.0	100.0	83.0	84.6
Percent converting to / now using:						
Google Apps / Docs for education	38.7	65.8	50.0	61.5	51.6	88.6
Microsoft Live @ EDU / Office 365 for education	61.3	38.0	20.0	39.0	93.0	35.0
ORGANIZATION, PLANNING AND IMPACT ISSUES						
Has your institution reorganized computing / information service units within the past 2 years? (percentages)						
Central IT services	53.6	68.4	65.6	56.9	51.8	40.2
Libraries	17.1	12.3	28.1	15.3	19.0	13.8
Telecom	31.3	35.1	31.3	34.7	31.5	25.3

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	All Institutions	Universities		MA & BA Colleges		Community Colleges
		Public	Private	Public	Private	
Do you anticipate a reorganization of computing / information services within the next 2 years? <i>(percentages)</i>						
Central IT services	45.1	66.7	56.3	48.6	38.1	37.5
Libraries	19.4	14.0	21.9	25.0	21.4	13.6
Telecom	27.3	26.3	18.8	33.3	28.6	23.9
Percentage of campuses that reorganized IT units in the past two years and expect to reorganize IT units again in the next two years?						
Central IT services	30.5	47.4	40.6	31.9	26.8	21.6
Libraries	6.2	3.5	15.6	5.6	8.3	1.1
Telecom	13.2	15.8	6.3	15.3	14.3	10.2
Does institution have a chief information / technology officer (CIO / CTO)?						
No	11.1	-	-	5.6	14.3	20.7
Currently under discussion	1.9	1.8	-	-	3.0	2.3
Yes	87.0	98.3	100.0	94.4	82.7	77.0
Which academic and operational units report to the CIO / CTO?						
Academic computing	89.8	94.6	90.6	85.3	92.1	85.1
Administrative computing	98.3	96.4	100.0	98.5	99.3	97.0
Libraries	11.9	5.4	12.5	5.9	18.0	10.4
Institutional research / analytics	12.2	12.5	9.4	8.8	12.2	16.4
Media center / services	72.1	64.3	75.0	73.5	76.3	67.2
Telecommunications	95.3	98.2	96.9	97.1	94.2	92.5
Distance / online education programs	23.2	14.3	28.1	20.6	23.7	29.9
Is the CIO (or senior institutional computing / IT officer) a member of the president's cabinet / executive committee?	61.9	62.5	87.5	63.2	52.5	67.2
Does your campus have a						
Chief / senior learning or instructional officer	26.4	26.3	21.9	27.8	16.1	46.6
Chief / senior security officer	42.3	82.5	75.0	56.9	24.6	26.1
Chief / senior data officer	11.8	15.8	15.6	15.3	4.8	18.2
Chief / senior officer for online education	36.0	61.4	34.4	44.4	19.0	45.5
Chief / senior officer for innovation	7.7	10.5	12.5	11.1	6.5	3.4
Does your institution have a board / trustee committee on computing / information technology?						
No	64.9	63.2	50.0	50.0	68.5	77.0
Under discussion	6.3	3.5	18.8	5.6	5.4	5.8
To begin in A/Y 2015-16	1.7	1.8	3.1	2.8	1.8	-
Yes, current board committee on computing / IT issues	27.2	31.6	28.1	41.7	24.4	17.2
Which unit provides tech support for most departmental computer labs?						
Individual department	5.5	17.5	21.9	5.6	1.2	-
Central IT service unit	70.2	24.6	40.6	62.5	85.7	87.4
Both	24.3	57.9	37.5	31.9	13.1	12.6
Which statement below best describes the way your campus manages the institutional presence and messaging on Facebook, Twitter, and other social media						
Individual departments operate with great autonomy.	32.9	47.4	25.0	37.5	32.7	23.0
A central office monitors the activities of individual departments and units but we do not have broad institutional policies or guidelines for social media.	27.4	31.6	34.4	26.4	26.2	25.3
A central office is responsible for setting the overall policies for and monitoring activities for individual departments and units.	39.7	21.1	40.6	36.1	41.1	51.7
What types of security incidents did your campus experience in the past year (2014-15)? <i>(percentages)</i>						
Theft of computer, phone, tablet, thumb drive, or other device device containing confidential data files	38.8	54.4	62.5	37.5	32.7	33.0
Hack / attack on the campus network	45.6	66.7	62.5	52.8	35.1	39.8
Hack / attack on student / personnel / alumni data files	13.4	40.4	18.8	18.1	6.0	4.5
Hack / attack on administrative / financial files	8.6	26.3	21.9	8.3	3.0	3.4
Hack / attack on research data files	5.5	28.1	9.4	2.8	1.2	-
Other attack on institutional data files	11.0	28.1	25.0	15.3	4.2	4.5
Identity management issues	30.2	56.1	28.1	36.1	24.4	20.5
Major computer virus infestation	10.6	14.0	21.9	11.1	8.9	6.8
Major spyware / malware infestation	9.8	17.5	9.4	6.9	9.5	8.0
Student security "incident" related to social networking sites	20.6	33.3	28.1	30.6	16.1	10.2
Exposure / loss of sensitive data in distributed environment (server not managed by central IT unit)	14.9	47.4	31.3	13.9	6.0	5.7
Intentional employee transgressions affecting IT security	8.9	17.5	15.6	9.7	4.8	8.0
Data security, reliability, or integrity issues involving Cloud services	6.5	14.0	6.3	11.1	3.6	3.4

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	All	Universities		MA & BA Colleges		Community Colleges
	Institutions	Public	Private	Public	Private	
How concerned are you about the following security issues for your institution in the coming year?						
<i>percentage reporting "high concern" (6/7); scale: 1=low; 7=high</i>						
Theft of computer, phone, tablet, thumb drive, or other device containing confidential data files	33.8	35.7	41.9	36.1	33.9	27.6
Hack / attack on the campus network	32.1	48.2	32.3	23.6	30.4	32.2
Hack / attack on student / personnel / alumni data files	27.1	26.8	32.3	26.4	26.8	26.7
Hack / attack on administrative / financial files	29.7	28.6	32.3	27.8	29.2	32.2
Hack / attack on research data files	14.7	28.6	19.4	9.7	10.1	17.2
Other attack on institutional data files	22.5	23.2	19.4	20.8	21.4	26.4
Identity management issues	28.1	30.4	35.5	25.0	28.0	26.7
Major computer virus infestation	14.0	12.5	6.5	8.3	13.7	23.0
Major spyware / malware infestation	15.9	16.1	9.7	8.3	16.1	24.1
Student security "incident" related to social networking sites	11.1	8.9	12.9	8.3	11.9	12.6
Exposure / loss of sensitive data in distributed environment (server not managed by central IT unit)	27.6	51.8	41.9	26.4	18.6	25.3
Intentional employee transgressions affecting IT security	12.8	17.9	9.7	11.1	10.1	17.2
Data security, reliability, or integrity issues involving Cloud services	21.5	25.0	26.7	21.1	17.5	25.6
Looking ahead, what's the likelihood that your institution will migrate (or has already migrated) to one or more Cloud / Software as a Service (SaaS) or Open Source applications by fall 2019? <i>(percent reporting high: scale score 6/7; 1=low; 7=high)</i>						
Cloud / Software as a Service (SaaS) Apps						
Business Intelligence / Big Data analytics	17.0	22.8	9.4	20.8	17.3	12.5
Collaboration Platforms / Applications	45.3	49.1	46.9	47.2	51.2	29.5
Content Management System	35.3	33.3	31.3	40.3	35.7	33.0
Continuing Education Management Platform	18.2	22.8	31.3	16.7	12.5	22.7
CRM services	43.2	38.6	53.1	41.7	55.4	20.5
Development System						
ePortfolio System	23.3	14.0	25.0	26.4	29.8	13.6
Financial System	38.4	29.8	28.1	50.0	47.0	21.6
HR System	17.7	14.0	21.9	23.6	15.5	18.2
Learning Management System	27.6	17.5	40.6	22.2	29.8	29.5
Learning Management System						
Lecture Capture	57.6	54.4	65.6	62.5	56.0	55.7
Research / Grants Management System	32.1	38.6	37.5	33.3	31.5	26.1
Student Information System	15.6	33.3	18.8	18.1	11.3	9.1
Video management	16.3	7.0	15.6	19.4	19.0	14.8
Open Source ERP Apps						
Business Intelligence / Big Data analytics	28.8	28.1	28.1	31.9	31.5	21.6
Business Intelligence / Big Data analytics	5.3	1.8	3.1	8.3	4.2	8.0
Collaboration Platforms / Applications	12.7	14.0	9.4	15.3	14.3	8.0
Content Management System	21.3	14.0	18.8	27.8	24.4	15.9
Continuing Education Management Platform	3.8	3.5	6.3	5.6	3.6	2.3
CRM services	5.5	3.5	6.3	9.7	4.8	4.5
Development System						
ePortfolio System	3.6	3.5	6.3	6.9	2.4	2.3
Financial System	12.5	17.5	9.4	13.9	14.9	4.5
HR System	4.8	12.3	-	8.3	2.4	3.4
Learning Management System	3.8	5.3	-	5.6	3.0	4.5
Learning Management System						
Lecture Capture	30.7	24.6	15.6	31.9	40.5	20.5
Research / Grants Management System	10.6	10.5	6.3	12.5	10.1	11.4
Student Information System	7.4	17.5	12.5	11.1	2.4	5.7
Video management	3.1	3.5	3.1	5.6	1.8	3.4
	7.7	5.3	3.1	9.7	7.7	9.1