THE 2011 CDW-G 21ST-CENTURY CAMPUS REPORT

July 26, 2011
INTRODUCTION

Now in its fourth year, the CDW-G 21st-Century Campus Report examines the role of technology in higher education. CDW-G surveyed more than 1,200 college students, faculty, administrators and Information Technology (IT) staff members to understand their perceptions of campus technology.

In 2011, the research finds that interactive technology offerings such as digital content, mobile devices and online learning are not only more important to the 21st-century campus – they are being used on campuses at an increasing rate.

For the first time, CDW-G surveyed college administrators to get their perspective of campus technology and found a disconnect between administrators’ priorities and how they leverage campus technology.
KEY FINDINGS

• Current college students say campus technology was an important factor in selecting their school
  • 92% of current high school students agree that technology is an important consideration in the college selection process*

• Administrators agree, but there is a disconnect as they place other priorities first
  • 98% of administrators say that learning and mastering technology skills will improve students’ educational and career opportunities
  • But just 22% say improving the use of technology in the learning process is one of their top priorities

• Campus technology use grows and expands year-over-year
  • In 2011, 31% of students say they use technology every day vs. 19% in 2010
  • Faculty and IT staff increasingly see value in mobility, and view e-readers, media tablets and smartphones as essential classroom technologies
  • 65% of students have taken an online class

• Rapidly changing technology needs and expectations can be met by addressing the faculty technology professional development gap:
  • Offer discipline-specific technology professional development
  • Have tech-savvy faculty lead professional development sessions

CAMPUS TECH COUNTS

- Administrators are focused on recruiting new students, and students report that campus technology offerings are part of their selection criteria.

Administrators say their #1 priority is: **Attracting and retaining** students.

87% of current college students considered their institution’s technology offerings when selecting their college.

92% of current high school students say that technology is an important consideration in their college selection process.*

ADMINISTRATORS SEE VALUE

• Additionally, administrators agree that technology is very important in the learning process

98%

of administrators say learning and mastering technology skills will improve students’ educational and career opportunities
BUT OTHER PRIORITIES COME FIRST

• While administrators are focused on student retention and addressing funding shortfalls, they are less focused on addressing what is a top priority for students – technology

Administrators: What are your top two priorities for the 2011-2012 school year?*

- 60% Attracting and retaining students
- 50% Addressing funding shortfalls, e.g., doing more with less
- 22% Using technology to enhance student learning
- 22% Making changes to academic programs
- 17% Updating existing facilities
- 12% Improving and enhancing Information Technology
- 11% Addressing staffing issues
- 1% Improving campus security

*Respondents asked to select their top two priorities
ADMINISTRATORS TAKE NOTE

• Students: How can a technology-rich classroom change the way you learn?

“It puts me more in charge of my own learning and enables better interaction with my classmates, which can lead to better understanding of the course material.”

“I find myself more engaged when I am presented with newer, more innovative technology.”

“It significantly decreases the time needed to gather information, which allows more time to learn that same material.”

“I take notes on Google Docs, and I can hyperlink to new information and share and compare notes in real time with classmates. I can then get my notes anywhere in the world that I have computer access.”
IT STEPS UP

• Campus technology is improving, with 23% of IT staff rating their institution’s technology as cutting edge, up from just 9% in 2010

IT Staff: How would you rate the current level of technology at your institution?

- Cutting edge with new/innovative technology adoption: 23%
- Current; hardware/software no more than three years old: 48%
- Adequate, but could be refreshed: 25%
- Aging: 3%
- In the dark ages: 1%
WHAT’S WORKING WITH TECHNOLOGY ON CAMPUS?
SCHOOLS KEEP STUDENTS CONNECTED

• IT staff report that many schools offer wireless networks and off-campus network access

IT Staff: Which of the following *tools and capabilities* does your institution offer/support today?*

- 85% Wireless network/Internet
- 79% Course management system
- 72% Remote access to school network
- 65% Video and/or Web conferencing
- 59% Virtual learning
- 49% Multimedia content streaming
- 48% Recorded class lectures
- 47% Student response systems
- 45% Open source applications
- 43% Podcasts/vodcasts
- 41% Blogs/wikis
- 34% Media tablets
- 16% E-reader devices

*Respondents asked to select all that apply
NEW TOOLS EXPAND LEARNING OPTIONS

• Faculty and students rate virtual learning and digital content high on the list of essential technologies.

Thinking about how to leverage technology to increase your engagement and performance in classes, which of the following technologies do you believe are essential to a 21st-century classroom?*

<table>
<thead>
<tr>
<th>Technology</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wireless network/Internet</td>
<td>78%</td>
<td>87%</td>
</tr>
<tr>
<td></td>
<td>(vs. 65% in 2010)</td>
<td>**</td>
</tr>
<tr>
<td>Digital content</td>
<td>72%</td>
<td>66%</td>
</tr>
<tr>
<td></td>
<td>(vs. 67% in 2010)</td>
<td>**</td>
</tr>
<tr>
<td>Virtual learning</td>
<td>48%</td>
<td>53%</td>
</tr>
<tr>
<td></td>
<td>(vs. 35% in 2010)</td>
<td>**</td>
</tr>
</tbody>
</table>

*Respondents asked to select all that apply **New student question for 2011
CAMPUSSES INCREASE DAILY TECH USE

• More students say they use technology as a learning tool in class every day vs. one year ago

**Students:** How often do you use technology as a learning tool while in class?

Percentage who said “**every day**”:

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>31%</td>
</tr>
<tr>
<td>2010</td>
<td>19%</td>
</tr>
</tbody>
</table>
STUDENTS LEARN VIRTUALLY

- IT staff report three-quarters of campuses support virtual and distance learning, 68% support video conferencing and 61% support lecture capture. Two-thirds of students say they have taken an online class.

65% of students have taken online classes

Students: What, if any, are the benefits of virtual learning?*

- Virtual learning provides increased flexibility to take classes: 71%
- Virtual learning provides the opportunity for professional adults to take classes while working full-time: 62%
- Virtual learning increases the variety of classes I can take: 48%
- Virtual learning gives me the opportunity to study with a broader variety of faculty: 29%

*Virtual learning delivers education to students regardless of where the professor and/or other students are located. Examples of virtual learning can include, but are not limited to, online classes and distance learning.
FACULTY AND IT STAFF SEE VALUE IN MOBILITY

- Mobile devices take on greater prominence as learning tools

Which of the following technologies do you believe are **essential** to a 21st-century classroom?

<table>
<thead>
<tr>
<th>Technology</th>
<th>2010 Faculty</th>
<th>2010 IT staff</th>
<th>2011 Faculty</th>
<th>2011 IT staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-readers</td>
<td>6%</td>
<td>16%</td>
<td>31%</td>
<td>17%</td>
</tr>
<tr>
<td>Media tablets</td>
<td>3%</td>
<td>15%</td>
<td>40%</td>
<td>15%</td>
</tr>
<tr>
<td>Smartphones</td>
<td></td>
<td></td>
<td>12%</td>
<td>44%</td>
</tr>
</tbody>
</table>

*Smartphones is a new response option in 2011*
WHAT STILL HOLDS CAMPUS TECHNOLOGY BACK?
FACULTY LACK NECESSARY TECH SKILLS

- Most stakeholders see faculty’s lack of technology knowledge as one of the biggest challenges to campus technology

What is the top challenge to classroom technology on your campus?

#1 **Faculty:** Professors don’t know how to use it (25%)

#1 **Students:** Professors don’t know how to use it (17%)

#1 **Administrators:** Professors don’t know how to use it (26%)

#2 **IT staff:** Professors don’t know how to use it (22%)
## RE-EVALUATE FACULTY IT EDUCATION

• According to faculty, 81% of institutions are providing technology-specific professional development, but programs are missing the mark

✓ “Have more people who *actually use* the technology in the classroom teach the sessions.”

✓ “Actually consider the *specific needs* of my discipline instead of general approaches which have little or no applicability.”

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### Solutions:

How does your institution provide professional development?*

<table>
<thead>
<tr>
<th>Professional Development Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group meetings/seminars</td>
<td>90%</td>
</tr>
<tr>
<td>Videos/online tutorials</td>
<td>60%</td>
</tr>
<tr>
<td>One-on-one meetings</td>
<td>45%</td>
</tr>
<tr>
<td>Peer mentoring</td>
<td>34%</td>
</tr>
</tbody>
</table>

When does your institution provide professional development?*

<table>
<thead>
<tr>
<th>Professional Development Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three or more times each school year</td>
<td>52%</td>
</tr>
<tr>
<td>Ongoing, my institution archives professional development tools on the network</td>
<td>35%</td>
</tr>
<tr>
<td>Ongoing, my institution has in-house technology experts</td>
<td>53%</td>
</tr>
<tr>
<td>Once each school year</td>
<td>12%</td>
</tr>
</tbody>
</table>

*Faculty asked to select all that apply
IT STAFF AND ADMINISTRATORS ARE NOT ON THE SAME PAGE

• Administrators place less importance on key classroom technologies, like digital content

Which of the following technologies do you believe are essential to a 21st-century classroom?*

<table>
<thead>
<tr>
<th>Technology</th>
<th>IT Staff</th>
<th>Admin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wireless network/Internet</td>
<td>87%</td>
<td>74%</td>
</tr>
<tr>
<td>Digital content</td>
<td>76%</td>
<td>66%</td>
</tr>
<tr>
<td>Laptop/netbook computer</td>
<td>74%</td>
<td>58%</td>
</tr>
<tr>
<td>Off-campus network access</td>
<td>72%</td>
<td>53%</td>
</tr>
<tr>
<td>Virtual learning</td>
<td>72%</td>
<td>63%</td>
</tr>
<tr>
<td>Smartphone</td>
<td>44%</td>
<td>22%</td>
</tr>
<tr>
<td>Media tablet</td>
<td>40%</td>
<td>26%</td>
</tr>
</tbody>
</table>

“[There is] a lack of understanding of what students and faculty desire [that] hinders the growth of classroom technology. I believe that if the administration truly had a feel for what people wanted, budgets might not be as constrictive.” – IT staff member

*Respondents asked to select all that apply
FEW SCHOOLS MEET THE DIGITAL DEMAND

The majority of faculty say digital content is essential, but only some schools currently offer it.

**IT Staff:** Thinking about digital content as an alternative to traditional print textbooks, my institution is:

- Using digital content: 15%
- Considering using digital content: 13%
- Considering a combined environment: print textbooks & digital content: 41%
- Not considering using digital content: 7%
- Don’t know: 22%
- Other: 2%

72% of faculty and 66% of students say digital content is *essential* to a 21st-century classroom.
OFFER OPTIONS FOR CONTENT DELIVERY

• Students, faculty and IT staff have cost concerns about moving to a digital environment

Top digital content benefit:* Lower costs for students to purchase required course materials

Top digital content challenge:* Affordability of digital textbook device

What’s the solution?

#1 response:* Allow students to have the option of purchasing a physical textbook or an e-reader device/media tablet; don’t make one or the other mandatory

*According to students, faculty and IT staff
Consider the students

“Recognize that our generation is accustomed to accessing information on the Internet. Students may be more likely to keep up with class if they can stay informed.”
- College student

Rethink your approach

“You have to re-learn how to teach. It is not simply replicating face to face instruction.”
- Faculty member

Don’t forget maintenance

“No technology is an install and forget. There has to be a base budget allocated to keep renewing the technology installed every three years.”
- IT staff member

Make it work

“Pick and choose the technology that is right for you and your teaching style. Not everyone needs to use everything.”
- Faculty member
METHODOLOGY

• CDW-G hired O’Keeffe & Company to conduct an online survey of college students, faculty and administrative and IT staff in June 2011

• Sample size and margin of error:
  • 1,209 total respondents: ± 2.7% margin of error at a 95% confidence level
  • 401 Students: ± 4.8% margin of error at a 95% confidence level
  • 306 Faculty: ± 5.6% margin of error at a 95% confidence level
  • 200 Administrative Staff: ± 6.9% margin of error at a 95% confidence level
  • 302 IT Staff: ± 5.6% margin of error at 95% confidence level

<table>
<thead>
<tr>
<th>Type of Institution</th>
<th>Students</th>
<th>Faculty</th>
<th>IT Staff</th>
<th>Admin</th>
</tr>
</thead>
<tbody>
<tr>
<td>For-Profit Institution*</td>
<td>6%</td>
<td>6%</td>
<td>4%</td>
<td>8%</td>
</tr>
<tr>
<td>Public School</td>
<td>53%</td>
<td>49%</td>
<td>49%</td>
<td>48%</td>
</tr>
<tr>
<td>Private School</td>
<td>25%</td>
<td>27%</td>
<td>35%</td>
<td>30%</td>
</tr>
<tr>
<td>Community College/Vocational-Technical School</td>
<td>16%</td>
<td>18%</td>
<td>12%</td>
<td>14%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Size of Institution</th>
<th>Students</th>
<th>Faculty</th>
<th>IT Staff</th>
<th>Admin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5,000 students</td>
<td>23%</td>
<td>22%</td>
<td>22%</td>
<td>26%</td>
</tr>
<tr>
<td>5,000-12,000 students</td>
<td>32%</td>
<td>30%</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>More than 12,000 students</td>
<td>45%</td>
<td>48%</td>
<td>48%</td>
<td>44%</td>
</tr>
</tbody>
</table>

*E.g., Phoenix, Strayer, DeVry, Kaplan
Thank you.

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