

IN HIGHER EDUCATION

DEMOGRAPHICS | ECONOMICS | ENVIRONMENT | GLOBAL EDUCATION | LEARNING | POLITICS | TECHNOLOGY

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The economy will continue to dominate higher education's discussions, as well as the world's, for at least the next ten years. No one sees recovery, in any sustained way, before mid-decade and it's likely to take at least six to seven years (*McKinsey Global Institute*, January 2010, "Debt and Deleveraging: The Global Credit Bubble and its Economic Consequences," www.mckinsey.com/mgi). What will the long-term effects of the global reordering mean for students, institutions, and the postsecondary market, in general?

Note: Due to the time-sensitive nature of some URLs, we cannot guarantee that all links will be active. Some links may require a subscription.

DEMOGRAPHICS

Observation

Students are graduating without jobs and with debt. They enrolled in record numbers with the promise that a college degree would bring better employment. That's not proving to be the case (*The New York Times*, July 6, 2010, www.nytimes.com/2010/07/07/business/economy/07generation.html?_r=1&th&emc=th).

- A Pew research report indicates that 37 percent of 18–24-year olds are unemployed, the largest percentage in 50 years (*The Christian Science Monitor*, April 23, 2010, www.csmonitor.com/layout/set/print/content/view/print/295191; *USA Today*, February 23, 2010, www.usatoday.com/news/education/2010-02-24-millennials24_ST_N.htm).
- Even when they have a job, 64 percent are unhappy in it (*Herman Trend Alert*, January 23, 2010, www.hermangroup.com).
- Even graduates with sought-after degrees like nursing and accounting had dim prospects. Fewer than half of US accounting majors had job offers this spring (*Yahoo! News*, June 9, 2010, www.news.yahoo.com/s/ap/20100609/ap_on_bi_ge/us_jobless_graduates/print).

Our Thoughts

Institutions are likely to feel the effects of low employment among graduates for twenty years to come. How likely are these grads to contribute to endowments, feel deep affiliations with their colleges, or even suggest that their children attend college?

- Contributions to colleges dropped 11.9 percent in 2009, the steepest decline since 1969 when recording began. Alumni giving rates were only 10 percent, the lowest level ever (*Inside Higher Ed*, February 3, 2010, www.insidehighered.com/news/2010/02/03/money; *The Chronicle of Higher Education*, June 24, 2010, www.chronicle.com/article/Annual-Fund-Revenue-Fell-in/66037/?sid=at&utm_source=at&utm_medium=en).
- High school graduation rates in the US have declined for the second straight year, so the pool of traditional students is decreasing, even as record numbers of students enrolled in higher education (*Education Week*, v 29, n 24, "Diplomas Count 2010: Graduation by the Numbers—Putting Data to Work for Student Success," www.edweek.org/ew/toc/2010/06/10/index.html; Associated Press, June 16, 2010, www.google.com/hostednews/ap/article/ALeqM5hcqKZx1fdaNnBSvFscZUJSbIN9tQD9GCG7AO0).
- Students and their families now have an additional item to check when looking at colleges—their financial health. For every 10 percent decline in endowment, universities typically cut 5 percent of tenure-grade faculty (National Bureau of Economic Research, April 2010, *NBER Working Paper*, J. Brown, S. Dimmock, Jun-Koo Kang, and S. Weisbenner "Why I Lost My Secretary: The Effect of Endowment Shocks on University Operations," www.nber.org/papers/w15861).

Observation

Retention and completion have moved into the top spot for support and attention by the US government, foundations, associations, and institutions (*The New York Times*, May 3, 2010, www.nytimes.com/2010/05/09/magazine/09fob-wwln-t.html?scp=15&sq=billion to higher education + foundation&st=cse).

- The top 100 metropolitan areas in the US saw fewer adults between 25 and 34 obtain bachelors degrees in the past eight years, with the gap between the cities with the highest and lowest rates growing from 8 percent in 1990 to 34 percent in 2008 (*Brookings Institute*, May 2010, A. Berube, “The State of Metropolitan America: Educational Attainment,” www.brookings.edu/metro/MetroAmericaChapters/education.aspx).
- About half of US college students who start a four-year degree finish in six years. Fewer than 30 percent of students pursuing a two-year degree full-time earn it within three years (*Complete College American*, June 2010, www.completecollege.org/alliance_of_states/).
- Community colleges have made an explicit commitment to adjust their mission beyond access to completion (*American Association of Community Colleges*, June 2010, C. Mullin, “Rebalancing the Mission: The Community College Completion Challenge,” www.aacc.nche.edu/Publications/Briefs/Pages/rb06152010.aspx).

Our Thoughts

The factors that play the most significant role in retention and completion are slowly coming to light. Student success has become a byword for many of these efforts that rely on data, engagement, and just plain caring about students.

- Students who indicate that they feel positively about their institution are significantly less likely to drop out or transfer (Association for Institutional Research, Annual Forum, June 2010, C. Campbell and J. Mislevy, “Students’ Perceptions Matter: Early Signs of Undergraduate Student Retention/Attrition,” 2009NEAIR_UG_Attrition_paper.pdf).
- Catching a failing student early is key as the student’s odds of finishing a degree drop if she or he fails even one course in the first semester (*EDUCAUSE Review*, D. Norris, L. Baer, J. Leonard, L. Pugliese, and P. Lebrere, “Action Analytics: Measuring and Improving Performance That Matters in Higher Education,” January/February 2008, www.educause.edu/.../EDUCAUSEReviewMagazineVolume43/ActionAnalyticsMeasuringandImp/162422; *The Chronicle of Higher Education*, June 2, 2010, www.chronicle.com/article/Education-Experts-Discuss-W/65755/).
- Low-income students who received help in filling out financial aid forms were 29 percent more likely to attend college than families who received only a pamphlet explaining how to apply. Without increased enrollment and completion of low-income and minority students, the US is unlikely to reach its goal of having the highest percentage of college graduates in the world. (National Bureau of Economic Research, E. Bettinger, B. Long, P. Oreopoulos, and L. Sanbonatsu, “The Role of Simplification and Information in College Decisions: Results from the H&R Block FAFSA Experiment” (*NBER Working Paper No. 15361*), www.nber.org/digest/feb10/w15361.html).

ECONOMICS

Observation

There appears to be little consensus on when and how we will see an economic recovery. Signs of improvement are often paired with those of continued recession.

- Nobel prize winner, Paul Krugman, predicts the US is at the start of a third great depression; one on par with the Long Depression of the 1880s and the Great Depression of the 1930s (*The New York Times*, June 27, 2010, www.nytimes.com/2010/06/28/opinion/28krugman.html?ref=paulkrugman).
- Nearly three-quarters of global executives surveyed by McKinsey say it’s at least somewhat likely that a sovereign-debt default will harm their countries’ economies over the next 12 months (*McKinsey Quarterly*, June 2010, www.mckinseyquarterly.com/PDFDownload.aspx?ar=2621).
- In February at the World Economic Forum in Davos, Switzerland, economists and financial experts had very mixed opinions about the strength of a global recovery and that was before Greece and the continuing turmoil in equity markets (*Knowledge@Wharton*, February 3, 2010, <http://knowledge.wharton.upenn.edu/article.cfm?articleid=2428>; *Knowledge@Wharton*, January 6-19, 2010, Newsletter, <http://knowledge.wharton.upenn.edu>).

Our Thoughts

For US higher education, the uncertainties carry additional concerns. Recessions create drops in funding that often never return to prior levels (State Higher Education Executive Officers, P. Lingenfelter, April 13, 2010, "Advocacy for Higher Education at the State Level: Challenges and Opportunities," www.sheeo.org/about/pres_speech.htm).

- Oil and gasoline prices are slowly rising again. Campuses need to begin to make sure past plans for reducing energy costs are still viable (*The New York Times*, March 8, 2010, www.nytimes.com/2010/03/09/business/09oil.html?scp=1&sq=Oil and gasoline prices&st=cse).
- Interest rates are at historic lows, which means that they have nowhere to go but up, particularly since there is likely to be significantly increased competition for capital around the world (*McKinsey Quarterly*, March 2010, www.mckinseyquarterly.com/Whats_next_for_global_banks_2545; *The New York Times*, April 10, 2010, www.nytimes.com/2010/04/11/business/economy/11rates.html?scp=1&sq=Interest Rates Have Nowhere to Go but Up&st=Search).
- Present projections for the US deficit may well mean that the prestige of US higher education could suffer significantly. To quote Lawrence H. Summers, "How long can the world's biggest borrower remain the world's biggest power?" (*The New York Times*, February 2, 2010, www.nytimes.com/2010/02/02/us/politics/02deficit.html).

Observation

The US pipeline to higher education is also being drastically affected by the recession. Even with Race to the Top and funding for K–12 jobs, the ability of many states and districts to adequately support education is declining rapidly.

- Even with modest rebounds in most states, K–12 education leaders are still facing serious budget shortfalls that will entail more job cuts, more crowded classrooms, and fewer resources for student learning (American Association of School Administrators, April 8, 2010, www.budurl.com/Study040810; *The New York Times*, April 21, 2010, www.nytimes.com/2010/04/21/education/21teachers.html?scp=1&sq=School+Districts+Are+Warning+of+Huge+Layoffs&st=nyt).
- State general fund spending has declined for an unprecedented two fiscal years, as tax revenues from all sources have plunged (National Association of State Budget Officers, www.nasbo.org/Publications/FiscalSurvey/tabid/65/Default.aspx).
- Spending cuts have not been enough to avoid bankruptcy in municipalities, as their tax receipts have had their steepest drop in over 50 years (Reed Construction Data, May 25, 2010, www.reedconstructiondata.com/news/2010/05/state-and-local-government-spending-to-decline-again-in-fy-11/).

Our Thoughts

Higher education is often first in line for budget cuts, as K–12, criminal justice, and healthcare are protected as much as possible (National Clearing House for Higher Education Management Systems (NCHEMS), April 16, 2010, D. Jones presentation to the SCUP Board of Directors).

- Moody's Investors Service forecast a negative outlook for all sectors of higher education for the second year in a row (*The Chronicle of Higher Education*, January 19, 2010, www.chronicle.com/article/Financial-Outlook-Remains-N/63642/).
- Higher education systems in a majority of states have suffered the second straight year of decline, even when stimulus dollars are factored into the equation. Without factoring in the stimulus monies, 37 states reported declines ranging from 0.1 percent to 21.1 percent (*Grapevine*, J. Palmer, Editor, "State Fiscal Support for Higher Education in Fiscal Year 2009–10," www.sheeo.org/finance/shef-home-htm).
- Private colleges have not been immune to the recession; the need to ensure enrollment remains up creates what some see as untenably high discount rates and fewer students paying full tuition (*Inside Higher Ed*, January 7, 2010, www.insidehighered.com/news/2010/01/07/cic).

Observation

Energy from renewable resources now accounts for nearly the same amount of domestic US energy production as nuclear power, about 11 percent (*E/The Environmental Magazine*, December 28, 2009, www.emagazine.com).

- Europe already has about 400 waste-to-energy plants that have reduced heating bills and removed landfills. Unfortunately, the US has only 87 such plants and there are no new ones being planned (*The New York Times*, April 12, 2010, www.nytimes.com/2010/04/13/science/earth/13trash.html?_r=1&scp=1&sq=Europe Finds Cleaner Energy from Trash&st=cse).
- After nine years, the first offshore wind farm was approved. Research indicates that if multiple offshore wind farms could be connected together in a power generating grid, it would ameliorate the problem of variable wind speed that now causes energy fluctuations (*The New York Times*, April 28, 2010, www.nytimes.com/2010/04/29/us/29wind.html; *Proceedings of the National Academy of Sciences*, February 23, 2010, W. Kempton, F. Pimenta, D. Veron, and B. Colle, "Electric power from offshore wind via synoptic-scale interconnection," www.pnas.org/cgi/doi/10.1073/pnas.0909075107).
- Researchers are coming closer to creating a commercially viable process for making biofuel from either algae or E. coli (*E/The Environmental Magazine*, March 29, 2010, www.emagazine.com; *Converge*, April 24, 2009, www.convergemag.com/stem/Future-Forces.html?page=1).

Our Thoughts

The realities of reducing greenhouse gas emissions are now being felt on campuses in the US, particularly ones that signed the American College and University Presidents Climate Commitment. Fifteen campuses have been removed for lack of compliance, but more are signing on (Second Nature, July 1, 2010, www.secondnature.org/news/acupcc_inactive_institutions_removed.html).

- The Environmental Protection Agency has proposed stricter standards for smog, an action that could spell trouble for the many campuses that use coal to generate power (*The New York Times*, January 7, 2010, www.nytimes.com/2010/01/08/science/earth/08smog.html?scp=1&sq=E.P.A. Announces Strict New Health Standards for Smog&st=cse; *The Chronicle of Higher Education*, January 10, 2010, www.chronicle.com/article/The-Coal-Conundrum/63459/).
- Tenants in green buildings are more productive and less likely to be absent for illness, but facilities must be monitored and tuned to achieve these results (*Bloomberg Business Week*, November 19, 2009, www.businessweek.com/the_thread/hotproperty/archives/2009/11/green_buildings.html; *The Chronicle of Higher Education*, October 12, 2009, www.chronicle.com/article/Regular-Checkups-of-Green-B/48756/).
- Carbon trading may not be the solution many hope it will be, at least not until the level of fraud it engenders can be more successfully prevented (*Knowledge@Wharton*, June 10, 2010, <http://knowledge.wharton.upenn.edu/article.cfm?articleid=2521>).

Observation

The environment remains a priority on many campuses, even with financial difficulties. More importantly, perhaps, institutions are moving beyond green buildings and energy consumption as their only strategies to becoming more sustainable.

- More than 100 student government presidents urged Congress to launch a national program for clean energy science and engineering education (*Americans for Energy Leadership*, April 28, 2010, www.leadenergy.org/reenergyse/resources).
- The state of Maryland is likely to adopt a graduation requirement for K-12 students that would ensure that environmental literacy is taught across the curriculum. Meanwhile, its federal legislators push for its inclusion in the reauthorization of the Elementary and Secondary Education Act (*Education Week*, July 16, 2010, www.edweek.org/ew/articles/2010/07/16/37environment.h29.html?tkn=NOYFALDNTIIj8DpuSTqYFxDCEdsyVNKJ8jG&print=1).
- More than 100 new programs in 'green studies' were added by colleges and universities in the US in 2009, compared with the three programs begun in 2005, and students are filling them as fast as they are created (*USA Today*, December 27, 2009, www.usatoday.com/money/industries/environment/2009-12-27-green-colleges_N.htm).

Our Thoughts

The changes that faculty, staff, and students are willing to make are varied, but in the long run, must be tied to the economic benefits of sustainable behavior for the individual.

- A recent study of the car purchasing views of Gen Y consumers revealed that saving money on gasoline is the driving factor in purchasing a 'greener' car (Michigan State University + Deloitte, January 20, 2010, www.research.msu.edu/tags/sustainability).
- Faculty members were able to accept an automatic computer shutoff at 11 pm on a campus when they learned it would save the equivalent of two faculty positions (*University Business*, June 2010, www.universitybusiness.com/viewarticle.aspx?articleid=1612).
- Small actions add up and campuses are taking creative approaches to saving money and the environment, including using different type fonts, making granola on campus, and having student gardens supply produce to the campus (*Ars Technica*, April 2010, www.arstechnica.com/business/news/2010/04/last-year-printer-comparison-website.ars; *The Chronicle of Higher Education*, May 23, 2010, www.chronicle.com/article/Saving-Money-One-Batch-of-165447/; *University Business*, June 2010, www.universitybusiness.com/viewarticle.aspx?articleid=1611).

| GLOBAL EDUCATION

Observation

International students enrolled in record numbers in the US in 2008, with the increase more pronounced for undergraduate than graduate studies (Institute of International Education (IIE), November 16, 2009, www.iie.org/en/Who-We-Are/News-and-Events/Press-Center/Press-Releases/2009/2009-11-16-Open-Doors-2009-International-Students-in-the-US).

- The US continues to have both the largest number of international enrollments and the greatest share of mobile students (*Center for International Education*, Number 58, Winter 2010, www.bc.edu/bc_org/avp/soe/cihe/newsletter/Number58/p9_Green&Koch.htm).
- While there are no centralized data, US colleges appear to be using conditional admission contingent on completing an English language-learning program as a means of attracting international undergraduates (*The Chronicle of Higher Education*, August 8, 2010, www.chronicle.com/article/Colleges-Extend-Conditional/123783/).
- A fall 2009 online survey by IIE indicates that undergraduate enrollment increases are unevenly distributed across institutions. Campuses that already have a significant international student population, particularly Chinese students, were more successful at recruitment than institutions with smaller international populations (Institute of International Education, November 16, 2009, www.iie.org/en/Who-We-Are/News-and-Events/Press-Center/Press-Releases/2009/2009-11-16-Fall-2009-Enrollment-Survey).

Our Thoughts

While the US continues to garner large numbers of students and applicants, it has left it up to individual institutions to attract them. The other top four receiving countries—the United Kingdom, Germany, France, and Australia—all have national programs focused on attracting international students (Center for International Education, Number 58, Winter 2010, www.bc.edu/bc_org/avp/soe/cihe/newsletter/Number58/p9_Green&Koch.htm).

- There has been a change in the countries of origin for graduate students to the US, with significant declines in those coming from South Korea and India (*Inside Higher Ed*, November 10, 2009, www.insidehighered.com/news/2009/11/10/gradenroll).
- The 2009 survey by QS (Quacquarelli Symonds) indicates that interest in doing graduate study in North America (US and Canada) has continued to decline (33.5 percent), while Europe has increased its share to 57 percent (*The Independent*, March 4, 2010, www.independent.co.uk/student/postgraduate/postgraduate-study/north-americas-appeal-to-postgraduates-wanes-as-more-european-universities-run-courses-in-english-1915368.html).
- There was no growth in the US numbers of first-time foreign student graduate enrollments in 2008–2009 (Council of Graduate Schools, November 2009, www.cgsnet.org/Default.aspx?tabid=172).

Observation

Countries' reasons for encouraging transnational higher education vary (*Journal of Studies in International Education*, V. Naidoo, "Transnational Higher Education: A Stock Take of Current Activity", May 21, 2008, www.ijsei.sagepub.com/content/13/3/310).

- As English has become the lingua franca of business, science, and the world, institutions that offer courses taught in English are attracting more students (*The Independent*, March 4, 2010, www.independent.co.uk/student/postgraduate/postgraduate-study/north-americas-appeal-to-postgraduates-wanes-as-more-european-universities-run-courses-in-english-1915368.html).
- When countries have insufficient capacity, their best students seek to study in other countries (Center for International Education, Number 58, Winter 2010, www.bc.edu/bc_org/avp/soe/cihe/newsletter/Number58/p9_Green&Koch.htm).
- International students can play a significant role in the economy of a country. For example, foreign enrollments in Australia represent its third-largest export industry (Center for International Education, Number 58, Winter 2010, www.bc.edu/bc_org/avp/soe/cihe/newsletter/Number58/p9_Green&Koch.htm).

Our Thoughts

Students' reasons for studying in another country are also diverse, but with a focus on personal benefits more often than not.

- The United Kingdom instituted a new visa policy for international students that makes it much more difficult for them to use a student visa to work (*The Guardian*, February 7, 2010, www.guardian.co.uk/education/2010/feb/07/student-visas-cuts-points-system).
- Institutions across the globe are finding that students are selecting higher education programs based on how they'll affect their ability to remain in that country and work after graduation (*The Chronicle of Higher Education*, March 21, 2010, www.chronicle.com/article/What-Do-International-Students-64746/).
- International students have become a significant group in international migration as a way to fill skill and labor gaps in receiving countries (*University World News*, August 8, 2010, www.universityworldnews.com/article.php?story=20100806175841809&mode=print; *The Wall Street Journal*, January 27, 2010, www.online.wsj.com/article/NA_WSJ_PUB:SB10001424052748704905604575026800522011226.html).

| LEARNING

Observation

Changes in the learning environment, sometimes very subtle, can affect the performance of students in classrooms.

- Exposure to the letters "A" or "F" at the start of an examination seems to have an effect on how well students score. Subjects receiving an analogies test with the label "Test Bank ID: A" scored significantly better than students with "Test Bank: F", with a "Test Bank ID: J" scoring in the middle (*British Journal of Educational Psychology*, Ciani, K. and Sheldon, K. "A versus F the effects of implicit letter priming on cognitive performance", Volume 80, Number 1, March 2010, pp. 99-119(21) www.bpsoc.publisher.ingentaconnect.com/content/bpsoc/bjep/2010/00000080/00000001/art00006-aff_2).
- A study of high school students found that the gender of the images of scientists affected test scores for females. When all male examples were used, girls' test scores were lower. They increased when textbook pictures were either all female or equally divided (*The Journal of Social Psychology*, Good, J., Woodzicka, J., and Wingfield, L., "The effects of gender stereotypic and counter-stereotypic textbook images on science performance." 150.2 (2010): 132-147, www.informaworld.com/smpp/content-db=all-content=a924046568-frm=titlelink).
- Recent research reports that a variety of skills are enhanced by playing action video games, including better visual selective attention and better focus (*eSchool News*, December 9, 2009, www.eschoolnews.com/2009/12/09/can-gaming-change-education/).

Our Thoughts

Technology is also introducing changes in the environment. Our interaction with it appears to be influencing how our brains are wired. The power to increase learning comes with the reality of our evolving nervous system (*The Shallows: What the Internet Is Doing to Our Brains*, (2010) Carr, N., W. W. Norton).

- Math software developed by the University of California-Irvine, based on neuroscience research, significantly increased the passing rate on a state examination in 64 of the lowest performing elementary schools in the state (*eSchool News*, March 17, 2010, www.eschoolnews.com/2010/03/17/technology-adds-to-students-math-comprehension/).
- Devices that track eye movements while reading on a screen can now be combined with software that infers a reader's progress and provides help when eyes pause on words or names (*eSchool News*, June 17, 2010, www.eschoolnews.com/2010/06/17/future-of-ereading-following-your-eyes/).
- Informal learning through television, video games, and the Internet has increased students' abilities with visual-spatial reasoning (*Science*, January 2, 2009, Greenfield, P., "Technology and Informal Education: What is Taught, What is Learned," v 323, pp 69-71).

Observation

The delivery of instruction in higher education has been evolving for a number of years. Recently, the proposed changes have been more visibly focused on core missions.

- Four-year institutions are looking to offer bachelor's degrees in three years (*Indianapolis Star*, April 19, 2010, [www.indystar.com/article/20100419/NEWS04/100419027/-1/NEWS/Daniels-State-needs-3-year-college-degrees](http://www.indystar.com/article/20100419/NEWS04/100419027/-1/NEWS/Daniels-State-needs-3-year-college-degrees;); *Los Angeles Times*, March 24, 2010, www.latimes.com/news/local/la-me-uc-future24-2010mar24,0,4457597.story).
- Florida's community colleges have been able to offer four-year degrees for nearly a decade (*The Chronicle of Higher Education*, January 19, 2007, www.chronicle.com/article/Floridas-Higher-Education-/122776/). Other community colleges are offering one-year associate's degrees (*The Chronicle of Higher Education*, April 25, 2010, www.chronicle.com/article/Experiment-at-Ivy-Tech-a/65221/).
- The mayor of Chicago has called for an end to "open door" admissions at Chicago City Colleges (*Education Week*, August 13, 2010, www.blogs.edweek.org/edweek/college_bound/2010/08/chicago_considers_ending_community_college_open_admission.html).

Our Thoughts

Changing an institution's mission is unlikely to be helpful to most students, particularly those in community and technical colleges.

- Overcrowded and under-resourced, students in California community colleges may now take online courses from for-profit Kaplan for credit (*The Chronicle of Higher Education*, February 8, 2010, www.chronicle.com/blogPost/California-Community-College/21134/).
- Community colleges are beginning to consider caps on the number of students they'll admit who need remedial course work (*The Denver Post*, February 8, 2010, www.denverpost.com/search/ci_14355221). Some are considering eliminating GED and basic-skills courses altogether (*The Sacramento Bee*, February 9, 2010, www.sacbee.com/2010/02/09/2523021/community-colleges-rethink-missions.html).
- Nearly 60 percent of community college students take at least one developmental education course (Community College Research Center: *CCRC Briefs*, February 2009, Number 40).

POLITICS

Observation

Even as public funding for higher education decreases, the number and cost of regulations at the federal and state level increases.

- Changes in the student loan process, particularly how the "cohort default rate" (CDR) is determined for each institution, will require campuses to spend considerably more time on compliance and likely subject them to bad publicity, as nearly everyone expects CDRs to increase (*Today's Campus*, April 2010, www.todaycampus.com/article/load.aspx?art=2018).
- At the same time, the US Departments of Education and Health and Human Services have failed to exchange data that allows the tracking of those who have defaulted on student loans in the past two years (*Inside Higher Ed*, March 17, 2010, www.insidehighered.com/news/2010/03/17/ndnh).
- Year-round Pell Grants are likely to further complicate the work of financial aid offices, as they need to prove that summer courses helped to accelerate degree completion. This is likely to be a labor-intensive process (*University Business*, June 2010, www.universitybusiness.com/viewarticle.aspx?articleid=1598).



Our Thoughts

The reality that regulations require the hiring of more administrators, generally at the expense of tenure-track faculty members, has not been lost on academics. One academic proposed, tongue in cheek we assume, that colleges add a line to their tuition bills labeled, "Federal Regulatory Compliance Fee" (*Inside Higher Ed*, January 12, 2010, www.insidehighered.com/views/2010/01/12/jones).

- Preliminary results have now been published of the survey of institutions initiated by the Internal Revenue Service in 2008. The IRS is concerned about the amount of unrelated business income that actually appears on 990-T forms; it just doesn't look like they're reporting enough (*Inside Higher Ed*, May 10, 2010, www.insidehighered.com/news/2010/05/10/irs).
- The Congressional Budget Office (CBO) released a study that indicates that colleges and universities may be inappropriately benefiting from their tax status by issuing tax-exempt bonds and then essentially using those funds to invest in higher-yield assets (*Inside Higher Ed*, May 3, 2010, www.insidehighered.com/news/2010/05/03/arbitrage).
- The US Department of Labor released new rules for what constitutes an educational internship, in an effort to keep organizations from exploiting students. It means that more students are likely to find themselves paying for internships as credit-bearing courses in an effort to keep employers happy (*The Chronicle of Higher Education*, April 21, 2010, www.chronicle.com/article/US-Labor-Department-Relea/65197/).

Observation

Higher education needs to pay attention to how the reauthorization of the Elementary and Secondary Education Act (ESEA) progresses. The US federal administration has given clear signals that it will find ways to make changes, with or without legislation.

- The winners of the first round of Race to the Top funding focused on low-performing schools, teacher quality and distribution, state data systems, and the use of data and assessments (*Education Week*, January 4, 2010, www.edweek.org/login.html?source=http://www.edweek.org/ew/articles/2010/01/06/16esea_ep.h29.html&destination=http://www.edweek.org/ew/articles/2010/01/06/16esea_ep.h29.html&levelId=2100).
- The National Governors Association (NGA) and the Council of Chief State School Officers (CCSSO) released a common set of academic standards for English and mathematics in June. Their aim is to ensure consistent learning goals across the states (*eSchool News*, June 2, 2010, www.eschoolnews.com/2010/06/02/final-common-standards-in-english-math-released/).
- Computer-based testing and multiple measures of achievement are at the core of the administration's requirements for assessment projects seeking funding from Race to the Top (*eSchool News*, April 16, 2010, www.eschoolnews.com/2010/04/16/assessments-get-21st-century-makeover/).

Our Thoughts

How will adopting common standards for K–12 education affect higher education in the long run? It's a first step that's never before been taken at this level in the US. We're not predicting any quick movement towards a national education system, but adopting standards puts the US closer to how the rest of the world addresses education.

- While it might take a generation to see the results, campuses should plan for better-prepared students (*The Chronicle of Higher Education*, June 2, 2010, www.chronicle.com/article/New-National-Standards-Seek/65752/).
- The proposed revisions of the No Child Left Behind (NCLB) act include financing K–12 schools based on the academic progress of students, not enrollment, with additional support going to schools that are failing (*The New York Times*, February 1, 2010, www.nytimes.com/2010/02/01/education/01child.html?_r=1&ref=no_child_left_behind_act).
- The US Departments of Labor and Education are also pushing for reauthorization of the Workforce Investment Act that provides funding for basic-skills, adult education, and job training. The goal is to leverage the common standards to ensure that students are both college and career ready (*The Chronicle of Higher Education*, March 25, 2010, www.chronicle.com/article/A-Top-Education-Official-Pr/64842/).

Observation

The outsourcing of IT infrastructure, particularly servers, is combining with virtualization software to create opportunities for savings.

- It's clear that moving data storage and some software functions to the cloud saves money for most institutions (EDUCAUSE: *ECAR Research Bulletin 4*, 2010, www.educause.edu/ecar).
- In an effort to cut costs, state and local governments are expected to adopt cloud computing, virtualization, service-oriented architecture, open-source software, and geospatial technologies at a compound annual growth rate of 22 percent over the next five years (*Federal Computer Week*, December 23, 2009, www.fcw.com/articles/2009/12/23/states-and-local-agencies-cloud-computing.aspx?sc_lang=en).
- The National Institute of Standards and Technology (NIST) has begun the process of creating standards for the cloud related to data interoperability, portability, and security (*Government Computer News*, May 20, 2010, www.gcn.com/articles/2010/05/20/nist-standards-portal.aspx?sc_lang=en).

Our Thoughts

Increasing capacity through the cloud and virtualization doesn't come without security concerns (*Federal Computer Week*, March 18, 2010, www.cw.com/articles/2010/03/18/dark-cloud-security.aspx?sc_lang=en). Unfortunately, those aren't the only new security issues appearing (*Government Computer News*, December 23, 2009, www.gcn.com/articles/2009/12/23/security-outlook-for-2010.aspx?sc_lang=en).

- Botnets, networks of compromised computers, have increased their presence on campuses, threatening student data systems, particularly those that rely on social security numbers (*eSchool News*, May 3, 2010, www.eschoolnews.com/2010/03/03/botnets-continue-to-threaten-campus-networks/).
- One way computers are being compromised is through the presence of fake anti-virus software. Google reported that 15 percent of malicious software it detected on 240 million Web pages was delivered through these programs (*Physorg.com*, April 27, 2010, www.physorg.com/news191614788.html).
- The next platform likely to see an increase in cyber-attacks will be smart phones, a staple of students on every campus (*Physorg.com*, February 17, 2010, www.physorg.com/news185608599.html).

Observation

The electronic delivery of books, journals, and data continues to be experimented with on campuses as a way to hold down costs for students. The competition in e-readers, in particular, is heating up and higher education is a prime market (EDUCAUSE, *ECAR Research Bulletin 2*, 2010, www.educause.edu/ecar).

- Accessibility issues for e-readers must be addressed, but hopefully not on a reader-by-reader basis (*Converge*, January 14, 2010, www.convergemag.com/edtech/The-Future-of-Learning.html).
- E-textbooks represent a large market for growth, with one seller reporting a 400 percent sales increase between 2008 and 2009 (*The Chronicle of Higher Education*, January 19, 2010, www.chronicle.com/blogPost/Leading-E-Textbook-Seller-R/205666/).
- In competition with e-textbooks and e-readers are services that rent printed textbooks—but students can't really write in any of them (*Inside Higher Ed*, January 12, 2010, www.insidehighered.com/news/2010/01/12/rent).

Our Thoughts

Students want lower cost alternatives to the escalating cost of textbooks. But are textbooks really a strange way to be bundling learning for the millennials?

- Adoption of "electronic reading technologies" is variable, with close to one-third of students reporting they're not even sure what an e-book is (*Research and Markets*, February 2009, www.researchandmarkets.com/reportinfo.asp?report_id=687632).
- Electronic publishing may make only a short stop on dedicated readers; the ability of the cloud to store texts and more is likely to overtake other efforts to distribute 'books' in the long run (*O'Reilly Radar*, October 28, 2009, www.radar.oreilly.com/2009/10/safari-books-online-60-a-cloud.html); *eSchool News*, January 5, 2010, www.eschoolnews.com/2010/01/05/five-ed-tech-stories-to-watch-for-2010/).
- Digital technology now makes it easier for instructors to write their own 'flexbooks', incorporating text, simulations, video, and more (*Argus Leader*, June 7, 2010, www.pqasb.pqarchiver.com/argusleader/access/2051300241.html?FMT=ABS&FMTS=ABS:FT&date=Jun+7%2C+2010&author=Jill+Meier&pub=Argus+Leader&edition=&startpage=n%2Fa&desc=School+considers+'flexbooks').