

## IN HIGHER EDUCATION

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

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The lack of a substantial increase in employment continues to affect higher education in the US and around the globe. Even the brightest economic predictions see only modest gains, and again the promise of ‘it’s never going back the way it was’. Some higher education gives erode—tenure for one. Some schools are so overwhelmed with students that little else can be done but cope. Distance education has proven more effective for students than face-to-face. Is online education mostly an expansion of access and not a zero sum game, as many have assumed? Our overriding question is whether the series of incremental changes we’ve seen in the last 15 or so years will finally cause a paradigm shift in the way higher education conceptualizes itself.

*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

In the past, demographics were destiny for higher education—if birthrates increased, then enrollment could be predicted to increase 18 years later. The global market for education has done more than simply provide nuances to that predictability; it’s made global demographics and economics a driver everywhere.

- The result of China’s family-planning policy has consequences for its long-term economic viability. The number of people between 20 and 24 will drop by one-fourth in the next decade and by 2050 there will be only 2.1 working-age adults for each retiree (*China Daily eClips*, [www.cdeclips.com/en/opinion/fullstory.html?id=28044](http://www.cdeclips.com/en/opinion/fullstory.html?id=28044)).
- During the last decade, the number of American students at Canadian universities more than doubled to nearly 10,000. They now represent the second-largest group of international students in Canada, after China (*Philadelphia Inquirer*, September 28, 2009, [www.philly.com/inquirer/local/20090928\\_More\\_U\\_S\\_students\\_picking\\_Canadian\\_universities.html?viewAll=y&c=y](http://www.philly.com/inquirer/local/20090928_More_U_S_students_picking_Canadian_universities.html?viewAll=y&c=y); *Globe and Mail*, May 18, 2009, [v1.theglobeandmail.com/servlet/story/RTGAM.20090518.wrecruiting18art2234/BNStory/National/home](http://v1.theglobeandmail.com/servlet/story/RTGAM.20090518.wrecruiting18art2234/BNStory/National/home)).
- The estimate of the number of students studying outside their nation of origin for 2009-2010 is close to 3 million, with an estimated value to receiving countries of US\$60 billion (*University World News*, September 27, 2009, Issue 0094, [www.universityworldnews.com/article.php?story=20090925022811395](http://www.universityworldnews.com/article.php?story=20090925022811395)).

#### Our Thoughts

The dominance of English-speaking tertiary providers, the US, Australia, and the UK, is no longer assured when students seek a portable, prestigious degree.

- The US share of world college students dropped from 29 percent in 1970 to about 12 percent in 2006 (*Inside HigherEd*, October 6, 2009, [www.insidehighered.com/news/2009/10/05/global](http://www.insidehighered.com/news/2009/10/05/global)).
- More than 8 percent of the total income of UK universities comes from overseas students’ fees (*The Guardian*, October 14, 2009, [www.guardian.co.uk/education/2009/oct/14/international-students-pay-20000](http://www.guardian.co.uk/education/2009/oct/14/international-students-pay-20000)). But the UK may lose a significant number of them due to a serious visa backlog that has resulted in over 14,000 Pakistani students alone being barred (*The Guardian*, October 14, 2009, [www.guardian.co.uk/global/2009/oct/14/overseas-students-fees-visas](http://www.guardian.co.uk/global/2009/oct/14/overseas-students-fees-visas)).
- The US issued 25 percent fewer visas to Indians for study at US institutions this year. Although the drop is attributed to the economic slowdown and a drop in aid from US colleges, it may be more permanent than some wish (*The Economic Times*, October 11, 2009, [/economictimes.indiatimes.com/articleshow/5111035.cms](http://economictimes.indiatimes.com/articleshow/5111035.cms)).

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## Observation

The economy is likely to have a long-term effect on enrollments. The mix of students will remain in flux and differ among publics, privates, and for-profit institutions. The “job-less recovery” is predicted to continue for at least five years (*The New York Times*, October 2, 2009, [www.nytimes.com/2009/10/03/business/economy/03jobs.html?\\_r=1](http://www.nytimes.com/2009/10/03/business/economy/03jobs.html?_r=1)).

- Increased enrollment in virtually all types of institutions, particularly those in regions with high unemployment, is likely to persist (*Bloomberg.com*, March 5, 2009, [www.bloomberg.com/apps/news?pid=20601103&sid=aLzll7sTaVM&refer=home](http://www.bloomberg.com/apps/news?pid=20601103&sid=aLzll7sTaVM&refer=home); *Inside HigherEd*, June 9, 2009; [www.insidehighered.com/news/2009/06/09/summer](http://www.insidehighered.com/news/2009/06/09/summer); W. J. Hussar and T. M. Bailey, 2009, “*Projections of Education Statistics to 2018*”, [www.edpubs.org](http://www.edpubs.org)).
- Two recent surveys, one by the College Board and one by Princeton Review, of high school seniors asked about the effects of the economy on their college-going plans. Both found that the recession is having a considerable impact on two-thirds of students’ college choices, with more opting for public institutions and community colleges (*The College Board and Art & Science Group, LLC*, April 13, 2009, [www.artsci.com/StudentPOLL/v7n3](http://www.artsci.com/StudentPOLL/v7n3); *USA Today*, March 25, 2009, [www.usatoday.com/news/education/2009-03-25-college-survey\\_N.htm](http://www.usatoday.com/news/education/2009-03-25-college-survey_N.htm)).
- It is predicted that student enrollment for those age 25 and older will increase at a higher rate than traditional-age students through at least 2015 (C. Aslanian and N. G. Giles, “*Hindsight, Insight, Foresight: Understanding Adult Learning Trends to Predict Future Opportunities*”, August 12, 2009, [sharing.educationdynamics.com/media/p/366.aspx](http://sharing.educationdynamics.com/media/p/366.aspx)).

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## Our Thoughts

The message that higher education around the world has been sending for years—a degree means successful employment at higher pay—is clearly being played out. The students want to attend, but how will they pay for it?

- Financial aid affects who goes to which college, with the perception of ‘price’ influencing where students apply (V. Louie, *Teachers College Record*, v 109 n 10, 2007, p. 2222-2251, [www.tcrecord.org](http://www.tcrecord.org), ID Number: 12569). The factors most likely to be considered in deciding where to go to college, whether 2-year or 4-year were ‘affordable/financial’ and ‘location’ (*Institute of Education Sciences, National Center for Education Statistics*, July 2009, NCES 2009-186, [nces.ed.gov/das/](http://nces.ed.gov/das/)).
- The nation’s poverty rate rose to 13.2 percent and the median family income was lower in 2008 than in 1998 when adjusted for inflation (*The New York Times*, September 11, 2009, [www.nytimes.com/2009/09/11/us/11poverty.html?scp=1&sq=Poverty+Rate&st=nyt](http://www.nytimes.com/2009/09/11/us/11poverty.html?scp=1&sq=Poverty+Rate&st=nyt)).
- The proportion of full-time students in two-year colleges increased 21 percent between 2000 and 2007, while part-time enrollment increased only 5 percent. The total share of two-year colleges’ undergraduate enrollment rose to 41 percent of students from 37 percent during the same time period. While we don’t have more recent figures, we believe this shift from 4-year to 2-year institutions is likely to continue increasing more quickly than originally predicted (*National Center for Education Statistics*, “The Condition of Education 2009,” June 2009, [nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2009081](http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2009081); *Pew Research Center*, October 29, 2009, [pewsocialtrends.org](http://pewsocialtrends.org)).

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## ECONOMICS

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### Observation

Students’ ability to find funding for college took many hits this fall, including the loss of state scholarship programs, lack of job options, and increased tuition.

- Michigan, Georgia, New Jersey, Florida, Illinois, and Ohio are some of the many states that have eliminated or reduced eligibility for state scholarship programs—some after students had already enrolled for the fall semester (*The Miami Herald*, August 11, 2009, [www.miamiherald.com](http://www.miamiherald.com); *The New York Times*, June 27, 2009, [www.nytimes.com](http://www.nytimes.com); *USA Today*, June 14, 2009, [www.usatoday.com/money/perfil/college/2009-06-14-aid-cuts-college\\_N.htm](http://www.usatoday.com/money/perfil/college/2009-06-14-aid-cuts-college_N.htm); *The Detroit Free Press*, June 11, 2009, [www.freepress.com](http://www.freepress.com); *The Atlanta Journal-Constitution*, April 26, 2009, [www.ajc.com/metro/content/metro/stories/2009/04/26/georgia\\_scholarship\\_eliminated.html](http://www.ajc.com/metro/content/metro/stories/2009/04/26/georgia_scholarship_eliminated.html)).
- Parents who saved for college costs using 529 plans or state plans that secured ‘tomorrow’s tuition, today’ are finding that there are no guarantees even for the thrifty (*Stateline*, April 20, 2009, “Tacking the recession: Tuition programs in danger”, [www.stateline.org/live/details/story?contentId=393552](http://www.stateline.org/live/details/story?contentId=393552)).
- Private foundations and communities that have supported scholarships have also cut back significantly on the number of students they are funding (*The New York Times*, June 27, 2009).

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## Our Thoughts

Students and parents are looking to institutions and lenders to help fill the gaps from state-sponsored programs. Changes in federal funding should help, but are unlikely to meet either need or the goals set by the administration.

- Person-to-person lending, always a source for those with financially able relatives, has now moved visibly to the web and among strangers (*The New York Times*, June 14, 2009, [http://www.nytimes.com/2009/06/14/fashion/14unithrive.html?\\_r=1&scp=1&sq=%22I%27m%20going%20to%20Harvard.%20Will%20You%20Sponsor%20Me?%22&st=cse](http://www.nytimes.com/2009/06/14/fashion/14unithrive.html?_r=1&scp=1&sq=%22I%27m%20going%20to%20Harvard.%20Will%20You%20Sponsor%20Me?%22&st=cse); *The Chicago Tribune*, August 16, 2009, [www.chicagotribune.com/business/yourmoney/sns-yourmoney-086loans,0,0674248.story](http://www.chicagotribune.com/business/yourmoney/sns-yourmoney-086loans,0,0674248.story)).
- Using credit cards to cover tuition costs, even just until a loan or scholarship comes in, is becoming costlier. Those fees that credit card companies charge to ‘front the money’ (2-3%)—are now being passed on to students by over a quarter of institutions (*USA Today*, June 30, 2009, [www.usatoday.com/money/perfi/credit/2009-06-30-credit-card-fees-college-tuition\\_N.htm](http://www.usatoday.com/money/perfi/credit/2009-06-30-credit-card-fees-college-tuition_N.htm)).
- Student loans are becoming the financing option of many, although patterns of debt vary across institutional types. For-profit college students saw their median debt load increase the most during that time, whether they were in certificate or bachelor’s programs (*College Board*, P. Steele and S. Baum, “Policy Brief: How Much Are College Students Borrowing?” August 2009, [professionals.collegeboard.com/policy-advocacy/affordability/policy-briefs](http://professionals.collegeboard.com/policy-advocacy/affordability/policy-briefs); *The Project on Student Debt*, April 21, 2009, [projectonstudentdebt.org/pub\\_view.php?idx=449](http://projectonstudentdebt.org/pub_view.php?idx=449)).

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## Observation

Like the proverbial deer in the headlights, institutions around the world are coping with reduced funding and often using similar tactics for cost containment and revenue enhancement (*University World News*, July 5, 2009, [www.universityworldnews.com/article.php?story=20090703122659593](http://www.universityworldnews.com/article.php?story=20090703122659593)).

- Publicly supported institutions understand that reduced state budgets will affect them for many years into the future. Thirty-five states are assuming reduced fiscal resources will be available in 2010, while 42 states were forced to reduce their previously enacted 2009 budgets (*National Governor’s Association*, *National Association of State Budget Officers*, June 2009, “The Fiscal Survey of States”, [www.nga.org](http://www.nga.org); *The New York Times*, July 18, 2009, [nytimes.com/2009/07/18/us/18states.html?\\_r=1&scp=1&sq="State+tax+revenues"&st=nyt](http://nytimes.com/2009/07/18/us/18states.html?_r=1&scp=1&sq=)).
- Community colleges have been hit the hardest and been very creative about when they offer courses (all night long) and even who pays for them (anyone who is willing to donate to support a course (*The San Francisco Chronicle*, June 22, 2009, [www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2009/06/21/BA7N189300.DTL](http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2009/06/21/BA7N189300.DTL); *Inside Higher Ed*, September 11, 2009, [www.insidehighered.com/views/sloane/sloane29](http://www.insidehighered.com/views/sloane/sloane29)).
- Space management is becoming a key area of concern, as no one wants the continuing operational costs of new construction. Likewise, energy management is high on everyone’s list (*American Association of State Colleges and Universities*; April 1, 2008, [www.aascu.org/media/media\\_releases/release08apr01.htm](http://www.aascu.org/media/media_releases/release08apr01.htm); *The Chronicle of Higher Education*, April 17, 2009, [chronicle.com/weekly/v55/i32/32a00104.htm](http://chronicle.com/weekly/v55/i32/32a00104.htm)).

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## Our Thoughts

The Higher Education Price Index (HEPI), as well as tuition, continues to outpace the Consumer Price Index (CPI), even though it dropped from 5 percent to 2.3 percent. Some are asking if higher education will be the next ‘bubble’ to burst (*The Commonfund Institute*, September 9, 2009, [www.commonfund.org/Commonfund/Archive/CF+Institute/2009+0909+HEPI+Press+Release.htm](http://www.commonfund.org/Commonfund/Archive/CF+Institute/2009+0909+HEPI+Press+Release.htm); *The Chronicle of Higher Education*, May 22, 2009, [chronicle.com/weekly/v55/i37/37a05601.htm](http://chronicle.com/weekly/v55/i37/37a05601.htm)).

- The highest percentage increase came in administrative salaries at 5.4 percent, up from 5 percent the year before. Virtually all the other components of the index had lower increases this fiscal year than last (*The Commonfund Institute*, September 9, 2009, [www.commonfund.org/Commonfund/Archive/CF+Institute/2009+0909+HEPI+Press+Release.htm](http://www.commonfund.org/Commonfund/Archive/CF+Institute/2009+0909+HEPI+Press+Release.htm)).
- According to the National Center for Public Policy and Higher Education, over the past 25 years, average college tuition and fees have risen by 440 percent—more than four times the rate of inflation and almost twice the rate of health care costs (*The Chronicle of Higher Education*, May 22, 2009, [chronicle.com/weekly/v55/i37/37a05601.htm](http://chronicle.com/weekly/v55/i37/37a05601.htm)).
- Tuition and fees at private colleges rose at the lowest rate in 37 years (4.3 percent), but still higher than the CPI, which was 3.8 percent in 2008 (*National Association of Independent Colleges and Universities*, June 29, 2009, [www.naicu.edu/news\\_room/private-college-tuition-rises-at-lowest-rate-in-37-years](http://www.naicu.edu/news_room/private-college-tuition-rises-at-lowest-rate-in-37-years)).

## Observation

China is now the world's top emitter of greenhouse gases. The US and China now account for some 40 percent of the world's emissions (*The McKinsey Quarterly*, M. Joerss, J. Woetzel, and H. Zhang, May 2009, "China's Green Opportunity"; *The New York Times*, June 8, 2009, [www.nytimes.com/2009/06/08/world/08treaty.html?\\_r=1&scp=2&sq=global+warming&st=nyt](http://www.nytimes.com/2009/06/08/world/08treaty.html?_r=1&scp=2&sq=global+warming&st=nyt)).

- Coal currently makes up 76 percent of China's primary energy production, oil 13 percent, and renewable energy only 8 percent (*Knowledge@Wharton*, April 20, 2009, [knowledge.wharton.upenn.edu/article.cfm?articleid=2214](http://knowledge.wharton.upenn.edu/article.cfm?articleid=2214)).
- China has announced that it will increase its nuclear power capacity nearly ten-fold to 86 gigawatts (gW) by 2020 from its 2008 capacity of 9 gW (*China Daily eClips*, February 4, 2009, [www.cdeclips.com/en/nation/fullstory.html?id=14685](http://www.cdeclips.com/en/nation/fullstory.html?id=14685)).
- Over half of China's shallow groundwater is contaminated and it has seven of the world's 10 most-polluted cities (*Knowledge@Wharton*, June 3, 2009, [knowledge.wharton.upenn.edu/article.cfm?articleid=2254](http://knowledge.wharton.upenn.edu/article.cfm?articleid=2254)).

## Our Thoughts

Chinese leaders pronounce important green goals and policies, but it's still a long way from seeing them implemented at the local level. They may want continued GDP (gross domestic product) growth of 8–9 percent, but it seems to come with skyrocketing pollution problems and an unwillingness to compromise with other countries.

- China is reducing its exports and tightly regulating the product of two rare earth minerals—dysprosium and terbium—that are vital to the manufacturing of hybrid cars, cell phones, large wind turbines, and computer monitors. It produces more than 99 percent of the world's supply (*The New York Times*, September 1, 2009, [www.nytimes.com/2009/09/01/business/global/01minerals.html?scp=4&sq="Rare+Earth+Minerals"&st=nyt](http://www.nytimes.com/2009/09/01/business/global/01minerals.html?scp=4&sq=)).
- China now produces more household waste than the US and unfortunately its policy to incinerate much of it is creating toxic emissions that fall across the world. (*The New York Times*, August 12, 2009, [query.nytimes.com/gst/fullpage.html?res=9800E1DD113DF931A2575BC0A96F9C8B63&scp=3&sq=&st=nyt](http://query.nytimes.com/gst/fullpage.html?res=9800E1DD113DF931A2575BC0A96F9C8B63&scp=3&sq=&st=nyt)).
- A key difficulty companies face with environmental regulation in China is that the national government makes green policies, but local authorities don't reliably enforce them; resulting, for example in more than 125,000 megawatts of coal-fired plants being built without permits (*Knowledge@Wharton*, June 3, 2009, [knowledge.wharton.upenn.edu/article.cfm?articleid=2254](http://knowledge.wharton.upenn.edu/article.cfm?articleid=2254)).

## Observation

Increasingly, technology is contributing to greenhouse gas emissions across the world. Research indicates that at a minimum, 2 percent of the global atmospheric carbon emissions can be traced to the information technology industry (*Knowledge@Wharton*, September 3, 2008, [knowledge.wharton.upenn.edu/article.cfm?articleid=2040](http://knowledge.wharton.upenn.edu/article.cfm?articleid=2040)).

- The cost to institutions of technology intensive research and teaching offers a clear target of opportunity for reducing energy use, if the campus has an energy management strategy in place. Only 36 percent of campuses had one in a recent survey by CDW-G (CDW-G, "2009 Energy Efficient IT Report," [newsroom.cdwg.com/features/feature-08-31-09.html](http://newsroom.cdwg.com/features/feature-08-31-09.html)).
- By 2011, data centers are expected to spend \$1 on power and cooling for every \$1 they spend on hardware (*EDUCAUSE Center for Applied Research*, September 30, 2008, v 2008, issue 20, [www.educause.edu/ecar/](http://www.educause.edu/ecar/)).
- The tendency to locate servers near those who have data on them, rather than in a centralized location or virtualized, has contributed to inefficiencies (*The Chronicle of Higher Education*, January 9, 2009, [chronicle.com/free/v55/i18/18a00103.htm](http://chronicle.com/free/v55/i18/18a00103.htm)).

## Our Thoughts

Unfortunately, on many campuses physical plant is in charge of energy use and IT has yet to be tapped for its ability to provide solutions that reduce energy consumption across a wide variety of venues.

- None of the top three energy saving measures in the CDW-G report focuses on data centers. Instead, IT departments are looking to migrate to LCD monitors, get employees to shut down equipment, and to buy ENERGY STAR®-qualified devices (CDW-G, "2009 Energy Efficient IT Report," [newsroom.cdwg.com/features/feature-08-31-09.html](http://newsroom.cdwg.com/features/feature-08-31-09.html)).
- Purchased electricity is by far the largest contributor to greenhouse gas emissions at campuses that are part of the American College and University Presidents Climate Commitment group (*Nature*, September 10, 2009, v 461, p 154-55).

- The incentives to focus on the energy costs of IT will likely increase if carbon emissions are taxed and can be expected as the cost of energy rises with economic recovery (*The McKinsey Quarterly*, Boccaletti, G., Löffler, M., and Oppenheim, J., October 2008, “How IT can cut carbon emissions.”)

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## GLOBAL EDUCATION

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### Observation

China's ability to rapidly expand its higher education system is bearing fruit, and could well accelerate, as its economy has suffered far less than others in the global economic downturn (*China Daily eClips*, November 5, 2009, [www.cdeclips.com/en/nation/fullstory.html?id=33032](http://www.cdeclips.com/en/nation/fullstory.html?id=33032)).

- Between 1998 and 2005, the number of students enrolled in tertiary education in China rose to 15.6 million—close to the numbers found in the US and the European Union (*University World News*, December 14, 2008, [universityworldnews.com/article.php?story=20081212095956597](http://universityworldnews.com/article.php?story=20081212095956597)).
- China continues to sign agreements with institutions around the world to advance its agenda of ‘soft power’ (*Arab News*, June 10, 2009, [arabnews.com/?page=1&section=0&article=123488&d=10&m=6&y=2009](http://arabnews.com/?page=1&section=0&article=123488&d=10&m=6&y=2009); Xinhua, April 7, 2009, [news.xinhuanet.com/english/2009-04/07/content\\_11144314.htm](http://news.xinhuanet.com/english/2009-04/07/content_11144314.htm)).
- China's Ministry of Education is supporting the recruitment of 2,000 foreign science and engineering researchers and providing support for 5,000 of its best graduate students to study abroad (*University World News*, May 31, 2009, [universityworldnews.com/article.php?story=20090528175524756](http://universityworldnews.com/article.php?story=20090528175524756)).

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### Our Thoughts

China has invested in higher education for many of the same reasons all nations do. What effects are those investments likely to have on the world of tertiary education?

- Recent graduates of US institutions are finding jobs in China, with greater responsibilities and more entrepreneurial options (*The New York Times*, August 11, 2009, [nytimes.com/2009/08/11/business/economy/11expats.html?\\_r=1&scp=2&csq=China&st=nyt](http://nytimes.com/2009/08/11/business/economy/11expats.html?_r=1&scp=2&csq=China&st=nyt)).
- China now ranks as the seventh most popular destination for Americans studying abroad (*The Chronicle of Higher Education*, August 31, 2009, [chronicle.com/article/Due-Diligence-for-Exchanges/48222/](http://chronicle.com/article/Due-Diligence-for-Exchanges/48222/)).
- China now has some 330 Confucius institutes for cultural awareness operating in universities in more than 80 countries. They began setting them up in 2004. Now the Chinese are also starting Chinese Teacher Training Centers to help universities teach Mandarin and collaborate on research within mainstream university programs (*University World News*, August 9, 2009, [www.universityworldnews.com/article.php?story=20090807100013824](http://www.universityworldnews.com/article.php?story=20090807100013824)).

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### Observation

At the first United Nations Educational, Scientific and Cultural Organization (UNESCO) World Conference on Higher Education in 1998 there about 100 million students enrolled in postsecondary education around the world. At the conference held in July 2009, it was estimated that there are close to 150 million (*Inside HigherEd*, July 7, 2009, [www.insidehighered.com/news/2009/07/07/unesco](http://www.insidehighered.com/news/2009/07/07/unesco)).

- The explosion in tertiary enrollments has put a strain on the key principles of publicly supported higher education—access, affordability, and quality—particularly for developing nations (*UNESCO*, July 8, 2009, “Communique—2009 World Conference on Higher Education: The New Dynamics of Higher Education Research for Societal Change and Development”, [www.unesco.org/en/wche2009/](http://www.unesco.org/en/wche2009/)).
- Countries that increased the rate of attendance at primary and secondary schools are now facing a shortage of places at their state-supported institutions of higher education that is unlikely to be met by traditional face-to-face instruction (*Inside HigherEd*, July 7, 2009, [www.insidehighered.com/news/2009/07/07/unesco](http://www.insidehighered.com/news/2009/07/07/unesco)).
- The growth in enrollment in private higher education to 30 percent of all enrollments has created uneven access and quality and remains a concern of many higher education leaders (*The Chronicle of Higher Education*, July 9, 2009, [chronicle.com/article/Conference-Ends-With-Call-f/47367/](http://chronicle.com/article/Conference-Ends-With-Call-f/47367/)).

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### Our Thoughts

While global tertiary education leaders focused on how to deliver opportunity across the world, rankings continue to drive investments in research, not in access (*University World News*, May 24, 2009, [www.universityworldnews.com/article.php?story=20090521174410568](http://www.universityworldnews.com/article.php?story=20090521174410568)).

- The European Commission on Education has funded a project to create a global university ranking system to rival those of China's Shanghai Jiao Tong University and the UK's QS-Times Higher Education (*University World News*, June 7, 2009, [www.universityworldnews.com/article.php?story=20090605131129195](http://www.universityworldnews.com/article.php?story=20090605131129195)).

- The European Higher Education Area has already started graduating students with three-year bachelor's degrees that have tackled the issue of learning outcomes head-on (C. Adelman, "The Bologna Process for US Eyes: Re-learning Higher Education in the Age of Convergence," April 2009; *Institute of International Education*, 2009, "Briefing Paper—"Three-Year Bologna-Compliant Degrees: Responses from US Graduate Schools.")
- Politicians in the US are wondering why higher education hasn't also moved to the European three-year model here (*Newsweek*, October 17, 2009, [www.newsweek.com/id/218183](http://www.newsweek.com/id/218183); March 3, 2009, "Floor Remarks of US Senator Lamar Alexander (R-TN) on the Appropriations Process, Iraq and Higher Education," [alexander.senate.gov/public/index.cfm?FuseAction=Speeches.Detail&Speech\\_id=681a63dc-a63b-42f6-ab04-c0942a202a8d&Month=3&Year=2009](http://alexander.senate.gov/public/index.cfm?FuseAction=Speeches.Detail&Speech_id=681a63dc-a63b-42f6-ab04-c0942a202a8d&Month=3&Year=2009)).

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## LEARNING

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### Observation

Research on the learning outcomes of online education has demonstrated that it's at least the equivalent, if not better, than the outcomes of just face-to-face courses. Blended learning provides the greatest benefits of all (*Center for Technology in Learning*, B. Means, Y. Toyama, R. Murphy, M. Bakia, and K. Jones (2009), US Department of Education, Office of Planning, Evaluation, and Policy Development, Policy and Program Studies Service, [www.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.doc](http://www.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.doc)).

- Another meta-analysis found that the primary effects of increased learning result from the greater amounts of time that online students spend engaging the course content and the instructor (*Review of Educational Research*, R. Bernard, P. Abrami, E. Borokhovski, C. A. Wade, R. Tamim, M. Surkes, and E. Bethel, "A Meta-analysis of Three Types of Interaction Treatments in Distance Education," September 2009, v 79, n 3, pp. 1243-1289, [rer.sagepub.com/cgi/content/abstract/79/3/1243](http://rer.sagepub.com/cgi/content/abstract/79/3/1243)).
- A Bill & Melinda Gates Foundation study of the effects of smaller class sizes in the Los Angeles Unified School District reinforces the finding that it's the teacher that makes the difference, not necessarily the number of students (*eSchool News*, May 29, 2009, [eschoolnews.com/news/top-news/index.cfm?i=58946](http://eschoolnews.com/news/top-news/index.cfm?i=58946)).
- The percent of K-12 school leaders who say that online and blended courses are financially beneficial to their schools, increased to 30 percent by 2007—so virtual schooling also helps with the economics of education (*Sloan Consortium*, February 2009, v 8, n 2, A. Picciano and J. Seaman, "K-12 Online Learning: A 2008 Follow-up of the Survey of US School District Administrators," [www.sloan-c.org/publications/view/v8n2/viewv8n2.htm](http://www.sloan-c.org/publications/view/v8n2/viewv8n2.htm)).

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### Our Thoughts

Ubiquitous learning is here. Students no longer have to show up in a bricks-and-mortar building to achieve their learning goals, they've become 'free agents.'

- An annual survey of K-12 students, administrators, teachers, and parents (*Net Day Speak Up 2008*, [www.netdayspeakup.org/Speakup2008/](http://www.netdayspeakup.org/Speakup2008/)) found that the largest digital disconnect is between what students are learning and living outside of school, and the technology they work with in school (*T.H.E. Journal*, April 2009, D. Nagel, "Students as 'Free Agent Learners,'" [thejournal.com/articles/2009/04/24/students-as-free-agent-learners.aspx?sc\\_lang=en](http://thejournal.com/articles/2009/04/24/students-as-free-agent-learners.aspx?sc_lang=en)).
- Forty-four states offer full-time virtual high schools through their public education systems (*eSchool News*, April 3, 2009, [eschoolnews.com/news/top-news/?i=58076](http://eschoolnews.com/news/top-news/?i=58076)).
- A pilot test of the use of mathematical video games by algebra students in Florida found that those who played over an 18-week period scored significantly higher on district benchmark tests than the students in the control group (*eSchool News*, April 28, 2009, [eschoolnews.com/news/classroom-news/index.cfm?i=58473](http://eschoolnews.com/news/classroom-news/index.cfm?i=58473)).

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### Observation

Students need to have increased involvement with the assessment of learning outcomes, particularly if institutions are serious about documenting the range of knowledge and skills that result from postsecondary education.

- A recent survey of members of the Association of American Colleges & Universities (AAC&U) found that only five-percent of the chief academic officers responding thought 'all students' understood the intended learning outcomes of the institutions and only 37 percent thought that of the 'majority of students' (*Hart Research Associates*, April 2009, "Trends in Learning Outcomes, General Education, and Assessment: A Survey of Members of The Association of American Colleges & Universities," [aacu.org/membership/documents/2009MemberSurvey\\_Part1.pdf](http://aacu.org/membership/documents/2009MemberSurvey_Part1.pdf)).
- K-12 students do understand the significance of high-stakes high school exit exams, but they're not having the intended or expected effects. A recent study of the California High School Exit Exam indicates that the test did not lead to improved achievement, did not increase early dropout rates, and created a biased test that did not help females or under-represented groups signal their workplace readiness to employers (S. Reardon, A. Atteberry, N. Arshan, and

M. Kurlaender, April 2009, "Effects of the California High School Exit Exam on Student Persistence, Achievement, and Graduation," [irepp.stanford.edu](http://irepp.stanford.edu)).

- Assessment of a "common set of intended learning outcomes" for all undergraduates was reported by 78 percent of the AAC&U survey respondents, but few use any common assessment tools or methods beyond capstone courses (37 percent) and student surveys and self-reports (35 percent) (*Hart Research Associates*, April 2009, "Trends in Learning Outcomes, General Education, and Assessment: A Survey of Members of The Association of American Colleges & Universities," [aacu.org/membership/documents/2009MemberSurvey\\_Part1.pdf](http://aacu.org/membership/documents/2009MemberSurvey_Part1.pdf)).

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## Our Thoughts

E-portfolios offer an assessment option that can cut across formal, informal, and occupational learning. Allowing students to own their work makes e-portfolios more effective, but requires increased trust and valid rubrics.

- The variety of platforms for storing, reviewing, and displaying e-portfolios has made them easier to adopt, but, of course, contributes to difficulty in making them portable (*Campus Technology*, March 11, 2009, [campustechnology.com/Forms/Search-Results.aspx?query="Phil+Ice"&collection=CT\\_Web](http://campustechnology.com/Forms/Search-Results.aspx?query=)).
- The AAC&U survey revealed that 57 percent of the respondents' colleges were using e-portfolios in some way, but only 42 percent reported using them as part of their assessment efforts (*Hart Research Associates*, April 2009, "Trends in Learning outcomes, General Education, and Assessment: A Survey of Members of The Association of American Colleges & Universities", [aacu.org/membership/documents/2009MemberSurvey\\_Part1.pdf](http://aacu.org/membership/documents/2009MemberSurvey_Part1.pdf)).
- At this point, e-portfolios have not gained significant acceptance in much of the corporate world. Instead we find the National Association of Manufacturers supporting certifications and credentials already in existence; including ones that rely on standardized testing from ACT via its National Career Readiness Certificate (*Inside HigherEd*, March 5, 2009, [insidehighered.com/news/2009/03/05/certification](http://insidehighered.com/news/2009/03/05/certification)).

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## POLITICS

### Observation

The new administration has pushed for changes in higher education, from increased Pell Grant funding to direct student loans. Not everything has passed both houses of Congress, but the implications are already being anticipated.

- The move to end bank-based, federally guaranteed loans will mean time and money spent on ensuring financial aid software systems can effectively handle the changes (*The Chronicle of Higher Education*, July 13, 2009, [chronicle.com/article/Some-Small-Colleges-Worry-A/47047/](http://chronicle.com/article/Some-Small-Colleges-Worry-A/47047/)).
- Funds for the development of statewide longitudinal data systems were included in stimulus funding (*eSchool News*, July 8, 2009, [www.eschoolnews.com/news/top-news/index.cfm?i=59549](http://www.eschoolnews.com/news/top-news/index.cfm?i=59549)).
- The Higher Education Opportunity Act of 2008 requires institutions to post a 'net price calculator' on their websites by 2011. Not yet mandated, but clearly something the US Department of Education desires, is an equivalent indicator of the post-baccalaureate placement rate (*Association for Institutional Research*, March 2009, [www.airweb.org/e-air/current/net\\_price\\_calculator\\_mar09.htm](http://www.airweb.org/e-air/current/net_price_calculator_mar09.htm); *Inside Higher Ed*, August 24, 2009, [insidehighered.com/news/2009/08/24/rules](http://insidehighered.com/news/2009/08/24/rules)).

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## Our Thoughts

The debate over health care legislation has stalled many of the administration's educational initiatives. Although there is no resolution yet, it's hard to see how health care changes won't affect higher education students, faculty, and staff.

- Non-profit organizations want their health care costs addressed, too, but don't see any relief in the bills brought forward so far (*The New York Times*, September 14, 2009, [nytimes.com/2009/09/14/health/policy/14nonprofit.html?\\_r=1&scp=1&sq="Nonprofit+Groups"&st=nyt](http://nytimes.com/2009/09/14/health/policy/14nonprofit.html?_r=1&scp=1&sq=)).
- How will colleges and universities manage the increased range of options likely to emerge from health care legislation? More are requiring students to purchase reasonably expensive student health insurance through the school, regardless of other coverage (*The Boston Globe*, November 6, 2009, [boston.com/news/health/articles/2009/11/06/report\\_blasts\\_student\\_health\\_plans/](http://boston.com/news/health/articles/2009/11/06/report_blasts_student_health_plans/)).
- Medical schools and teaching hospitals will all be involved in the implementation of electronic health records. Although the change is supported by stimulus funds, without a national information exchange system, it could be time and money spent without the reward of reduced costs and higher quality of care (*Federal Computer Week*, August 7, 2009, [fcw.com/articles/2009/08/10/feat-is-the-nhin--ready-for-health-it-stimulus.aspx?sc\\_lang=en](http://fcw.com/articles/2009/08/10/feat-is-the-nhin--ready-for-health-it-stimulus.aspx?sc_lang=en)).

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## Observation

National, but not federal, standards for K-12 mathematics and English are being developed under the auspices of the Council of Chief State School Officers and the National Governors Association. Called the Common Core State Standards initiative, every state but Texas has agreed to participate ([www.corestandards.org](http://www.corestandards.org); *Inside Higher Ed*, September 21, 2009, [insidehighered.com/news/2009/09/21/core](http://insidehighered.com/news/2009/09/21/core)).

- State higher education systems not only don't have common standards for what should be learned, the majority (38) aren't even trying to systematically gather information on what is being learned (*Education Sector*, June 2009, C. Aldeman and K. Carey, "Ready to Assemble: Grading State Higher Education Accountability Systems", [www.educationsector.org](http://www.educationsector.org)).
- Research from the Center for Studies in Higher Education, indicated that the existing standardized measures of learning—the Collegiate Learning Assessment (CLA) and the National Survey of Student Engagement (NSSE)—are not valid as campus-wide indicators of learning outcomes (*Center for Studies in Higher Education*, 2009, G. Thomson and J. A. Douglass, "Decoding Learning Gains: Measuring Outcomes and the Pivotal Role of the Major and Student Backgrounds", CSHE.5.09, [cshe.berkeley.edu/](http://cshe.berkeley.edu/)).
- States not only don't gather much information on learning, what they do collect is often not available in a form that can be used to answer the questions most frequently posed by the public (*Education Sector*, June 2009, C. Aldeman and K. Carey, "Ready to Assemble: Grading State Higher Education Accountability Systems," [www.educationsector.org](http://www.educationsector.org)).

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## Our Thoughts

States are competing for \$4.35 billion in grant funding through the "Race to the Top" initiative for K-12 schools. In order to qualify, state legislatures have to pass reform bills that include expansion of charter schools and a mechanism for rewarding and retaining the best teachers (*eSchool News*, November 12, 2009, [www.eschoolnews.com/news/top-news/index.cfm?i=61767](http://www.eschoolnews.com/news/top-news/index.cfm?i=61767)).

- Combined with the development of standards, the federal administration is moving its educational change agenda through state legislatures and systems, rather than through federal law. Will it use the same tactics for reform in higher education?
- In negotiations over regulations regarding accreditation, language that guarded the ability of institutions to set their own standards for student success was maintained (*Inside Higher Ed*, May 20, 2009, [www.insidehighered.com/news/2009/05/20/accredit](http://www.insidehighered.com/news/2009/05/20/accredit)).
- President Obama has called for all Americans to commit to at least one year of education beyond high school, but most people agree there is both not enough capacity nor a sufficient need for everyone to accomplish that goal (*The Chronicle of Higher Education*, May 22, 2009, [chronicle.com/weekly/v55/i37/37a01601.htm](http://chronicle.com/weekly/v55/i37/37a01601.htm)).

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## TECHNOLOGY

### Observation

IT security on campuses has continued to evolve, but it still faces many challenges, some external, but most internal.

- The Conficker worm is still at large, as it has been since a year ago (*The New York Times*, November 23, 2009, [nytimes.com/reuters/2009/11/23/technology/tech-us-iphone-security.html?\\_r=1&scp=1&sq=%22conficker%22&st=cse](http://nytimes.com/reuters/2009/11/23/technology/tech-us-iphone-security.html?_r=1&scp=1&sq=%22conficker%22&st=cse)).
- In 2007, 49 percent of the data breaches on US campuses were the result of lost or stolen (unencrypted) laptops and portable media (*EDUCAUSE*, ECAR Research Bulletin, May 5, 2009, T. Clark, "Securing Institutional Data: Let's Make It Everyone's Business," Volume 2009, Issue 9, [www.educause.edu/ecar/](http://www.educause.edu/ecar/)).
- From 2005 through 2007, there were slightly less than 300 security breaches at universities and colleges. The most common form of security breach was unauthorized access from individuals inside the institution's system; next was the result of accidental online exposure; the third most frequent type of breach was via stolen laptops (*JMC Privacy Consulting Group*, J. Correlli, 2009, [jmconsulting.wptlite.com/default.asp?id=3398](http://jmconsulting.wptlite.com/default.asp?id=3398)).

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## Our Thoughts

The federal government has initiated a stronger stance on cyber-security, making it part of the national security system ("Cyberspace Policy Review", May 2009, [whitehouse.gov/assets/.../Cyberspace\\_Policy\\_Review\\_final.pdf](http://whitehouse.gov/assets/.../Cyberspace_Policy_Review_final.pdf))

- In conjunction with this review, the federal government is also piloting an expansion of digital identity verification via the OpenID Foundation and the Information Card Foundation. Institutions may have even more reasons to outsource their email and other functions, as Google is a vendor partner, along with Yahoo, PayPal, Equifax, AOL, and others (*Federal Computer Week*, September 9, 2009, [fcw.com/articles/2009/09/09/open-identity-groups-collaborate-with-federal-agencies.aspx?sc\\_lang=en](http://fcw.com/articles/2009/09/09/open-identity-groups-collaborate-with-federal-agencies.aspx?sc_lang=en))
- Members of the Association for Information Communications Technology Professionals in Higher Education (ACUTA) reported that half the respondents in a survey of computer officials in higher education revealed that their campuses had suffered a security breach in the last year (*eCampus News*, June 11, 2009, [www.ecampusnews.com/news/top-news/?i=59161](http://www.ecampusnews.com/news/top-news/?i=59161)).
- Finding ways to change the behavior of faculty, staff, and students will be critical to securing data and identify. Even with the help of higher level security programs, people on campus are the ones most likely to introduce viruses, botnets, and other alien programs into a campus' system (*EDUCAUSE*, ECAR Research Bulletin, May 5, 2009, T. Clark, "Securing Institutional Data: Let's Make It Everyone's Business," Volume 2009, Issue 9, [www.educause.edu/ecar/](http://www.educause.edu/ecar/); *eCampus News*, June 11, 2009, [www.ecampusnews.com/news/top-news/?i=59161](http://www.ecampusnews.com/news/top-news/?i=59161); *EDUCAUSE Review*, September/October 2009, J. Suess and K. Morooney, "Identify Management & Trust Services", [creativecommons.org/licenses/by-nc-sa/3.0/us/](http://creativecommons.org/licenses/by-nc-sa/3.0/us/)).

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## Observation

Even in times of down budgets, campuses need to find a way to invest in technology, from supercomputer time to Internet connection speeds (*The Chronicle of Higher Education*, August 10, 2009, <http://chronicle.com/article/Your-College-Gets-a-Superco/47957/>).

- The largest share of the IT budget goes to hardware, regardless of the size of the campus (*Campus Technology*, August 2009, p 42, [campustechnology.com/articles/2009/08/01/trendspotter.aspx?sc\\_lang=en](http://campustechnology.com/articles/2009/08/01/trendspotter.aspx?sc_lang=en)).
- The trend looks similar in business, as 40 percent of global IT executives in a recent survey expect to increase their new IT investments and 17 percent to maintain their present level. The story is different for operating costs, where 43 percent of executives expect a reduction (*The McKinsey Quarterly*, November 2008, "IT's Unmet Potential").
- EDUCAUSE's annual survey of IT issues found 'funding IT' is the number one concern of higher education IT executives (*EDUCAUSE Review*, July/August, A. Agee and C. Yang, "top-Ten IT Issues 2009, pp 45-58).

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## Our Thoughts

Campus IT executives are now dealing with a range of issues that have gone far beyond the purchasing of computers for faculty and running the student data system. Their ability to effectively influence planning in an institution could be the most important task ahead in the ever-expanding portfolio of expectations for technology (*EDUCAUSE Review*, July/August, A. Agee and C. Yang, "Top-Ten IT Issues 2009, pp 45-58).

- The increase in technology spending on campuses is predicted to slow to only 1-2 percent through 2013—of course, most of the rest of campus is facing decreases (*eCampus News*, May 19, 2009).
- Broadband speed remains a problem throughout the US, which ranks 28<sup>th</sup> in the world (*Yahoo Tech News*, August 25, 2009; *The New York Times*, March 10, 2009, [bits.blogs.nytimes.com/2009/03/11/why-is-their-broadband-cheaper/?scp=1&sq=Bits "The Broadband Gap" &st=cse](http://bits.blogs.nytimes.com/2009/03/11/why-is-their-broadband-cheaper/?scp=1&sq=Bits%20The%20Broadband%20Gap%20&st=cse)).
- The library and computing services will move even closer together, if they're not combined already, with the increased acceptance and expectation of e-book availability (*The Chronicle of Higher Education*, June 12, 2009, [chronicle.com/free/v55/i39/39a01801.htm](http://chronicle.com/free/v55/i39/39a01801.htm); *eSchool News*, September 1, 2009, [www.eschoolnews.com/news/top-news/?i=60446](http://www.eschoolnews.com/news/top-news/?i=60446)).

