



# Trends in Higher Education

July 2005

The Society for College and University Planning publishes this quarterly environmental scanning report as one outcome of routine work which informs our board of directors. We share this in the interest of providing our members and the broader higher education community with an ongoing analysis of trends that affect integrated planning in institutions. For your convenience, trends are categorized as Demographics, Economy, Environment, Global Education, Learning, Politics, and Technology. Within each category we share some facts from our environmental scanning and we also share with you some of our thoughts about the implications of those facts.

We hope that you find it useful and welcome your thoughts and comments; share them by email at [trends@scup.org](mailto:trends@scup.org). This report and others in the series can be found in SCUP's website.

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## Demographics

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### Fact

**The majority of undergraduate students (59 percent) attended more than one college either through transfer or simultaneous enrollment.**

- 60 percent of students who started in community colleges transferred at least once, taking an average of eight years to finish their bachelor's degrees.
- 28 percent of all students who started in four-year institutions, whether public or private, transferred or enrolled simultaneously in two colleges.

### Our Thoughts

- Assessing graduation rates by single institution cohort is proving less and less useful as a way to determine the quality and value of higher education.
- It's time for government agencies to find effective ways of tracking students across institutions to determine real graduation rates. Then they need to give credit for graduation to ALL the institutions the student attended.
- The national student database would help this effort, but not if it compromises privacy and can't be kept secure.
- Community colleges have the most experience in tracking student educational success, maybe it's time someone tapped into that.



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## Fact

**Six schools in the University of California system have pulled out of the National Merit Scholarship program because of its reliance on a single test, the PSAT.**

- Over 1.4 million students took the qualifying exam in 2004, which selects 16,000 for potential merit scholarships.
- About 8,000 students actually receive funding based on their school of choice and available scholarships.
- The Ivy League schools stopped participating in the National Merit program a while ago in favor of strictly need-based financial aid.

## Our Thoughts

- The debate over standardized tests, as the principle criterion for college admissions and success, will only continue to grow. Add to that the realities of balancing merit against financial need and the National Merit Scholarship program may not be the only target.
- As costs rise, providing large scholarship packages to attract top students is falling under increased scrutiny, in publics and privates. Schools that offer National Merit Scholarships tend to have fewer Pell Grant recipients.
- California is often a bellwether state for public institutions. If another large state—Texas, Florida, or New York—opts out, then the future of the National Merit program could be in jeopardy.

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## Fact

**The decade since 1993 saw college enrollments grow by 15 percent to 16.6 million from 14.4 million, with minority students now making up nearly 30 percent of the total undergraduate population.**

- Hispanic students increased from 4 percent of the students in 1993 to 10 percent in 2003.
- Black students increased from 10 percent to 13 percent and Asian students from 4 percent to 7 percent of the total.
- The percentage of male students declined and is projected to continue to do so. The National Center for Education Statistics (NCES) predicts only 41 percent of the undergraduate population will be male by 2010.
- Enrollment at two-year colleges continues to increase at a faster pace than four-year institutions.

## Our Thoughts

- The growth in minority enrollment mirrors the growth in the US population as a whole, albeit at a lower level than actual numbers. These students are likely to be best served through different configurations of support services, including residential living arrangements. Planners who can accommodate them will have a head start on recruitment.
- The continued increase in female students may mean it's finally time to retrofit residence halls, classroom buildings, and athletic facilities for 'potty parity,' if nothing else.
- Evidence is growing that males are quietly receiving preferential treatment in admissions, just as we predicted.



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# Economics

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## Fact

**Federal obligations for academic research have continued to rise (10.3 percent in 2003), but funding for capital improvements has fallen since the late 1990s.**

- Less tax revenue is available for capital projects at public universities.
- Companies have lower earnings and are investing less in research and development, either labor or capital upgrades.

## Our Thoughts

- Laboratory projects must be able to demonstrate that present and future flexibility has been built in to furniture, utility services, equipment, and the number of stations.
- Open laboratory spaces with moveable walls mean even top scientists have to join the 'office cube' world. Universities simply can't afford to customize enclosed spaces for them anymore.
- Partnerships across universities, government agencies, and private industry will increase with shared laboratory/building space leading the way for the cross-pollination of research funding and ideas.

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## Fact

**The cost of a barrel of oil has hit an all time high, over \$60.00, and there is no predicting whether or when it will return to lower levels.**

## Our Thoughts

- The increased cost of commuting is likely to affect community colleges more than any other sector. Those colleges that can offer more online options or allow students to schedule more 'one trip' classes are likely to keep their enrollments at present levels.
- Energy costs may force campuses to spend on energy reduction rather than invest in other needed capital projects.
- Space utilization may move up on campus agendas as making the best use of space also means the money spent to keep them heated and cooled is used wisely.

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## Fact

**Research from the Institute for Higher Education Policy again reinforces the benefits of higher education to the economic health of states. In every state, an increase in the number of citizens with any form of postsecondary education correlates with decreased unemployment and public assistance and increased volunteerism, voting, and personal income.**

## Our Thoughts

- Even as the enduring economic benefits of higher education are verified, for both individuals and society, we find that decreased funding is reducing access for the most needy.
- As public universities, particularly state flagship institutions, rely more on private than public funding, entering freshman increasingly come from the top socio-economic quarter (close to 75 percent in many institutions).



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# Environment

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## Fact

**More state legislatures are requiring sustainable design and buildings for all state buildings, including campuses. State systems are responding positively and adopting their own green building and energy policies.**

## Our Thoughts

- Sustainability is no longer considered just another costly fad. We expect more legislatures to mandate energy reduction through green design across their states. We're not at a tipping point yet, but the south is leading the way.
- Legislatures and state systems are also likely to increase their scrutiny of how construction decisions are made. The good news is that this may make life easier for campuses that can now use a single general contractor, rather than having to bid out for multiple systems.

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## Fact

**The first colleges have been assessed fines by the Environment Protection Agency (EPA) for hazardous material mismanagement.**

## Our Thoughts

- Research continues to become more expensive as colleges now must ensure compliance with the complex set of regulations the EPA requires for hazardous material.
- As we suggested before, the EPA will continue to expand its review of how campuses deal with not just waste, but also their overall environmental stewardship. They're no longer exempt from dealing with run-off from parking lots, wastewater management, and all the other environmental issues that industry and communities have faced for years.

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## Fact

**A recent survey of air travelers revealed that over 90 percent would be willing to pay up to \$50 more per ticket (\$300 baseline price) to mitigate greenhouse effects. An equivalent percent stated they would switch travel agencies to ones that offered full or partial offsetting of emissions.**

## Our Thoughts

- US citizens have increased their concern about global warming, even without ratification of the Kyoto Protocol. Campuses that market their sustainable practices, including reducing greenhouse emissions, may find they have a competitive advantage.
- Unfortunately, the Chicago carbon trade exchange company has stopped its US operations due to low profitability. How can campuses be responsive to both forces?



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# Global Education

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## Fact

The number of tertiary students worldwide doubled in size between 1975 and 1995 from 40.3 million to 80.5 million. Global institutions, those for- and non-profit universities with a physical presence in multiple countries, are continuing to expand to meet the demand for postsecondary education.

## Our Thoughts

- UK, European, Australian, Japanese, and US universities have all opened ‘branch’ campuses across the world. The opportunities for campus master planning are extensive. How will design be accommodated to local conditions while still maintaining the quality and integrity of the home institution?
- Increasingly universities will need to mix online education and research options with a physical presence if they wish to compete globally for talented students and faculty resources.
- How will global education institutions maintain a presence in their alumni’s lives and forge relationships that encourage support for the home institution?
- How will the home institutions negotiate intellectual property rights—especially when multiple countries or companies support research?

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## Fact

The US is more vulnerable than ever to losing its innovation edge in science and engineering.

- In 2000, 17 percent of US bachelor’s degrees were in science and engineering; worldwide they were 27 percent and in China, 52 percent.
- The highest a US university finished in the Association for Computing Machinery’s International Programming Contest was 17th. The top three finishers were from China, Russia, and Canada.
- Likewise, no American students made it to the final round of the Top Coder Collegiate Challenge, the world series of college software programmers.

## Our Thoughts

- Changing the spigot mentality of science and engineering programs needs to rise to the top of the national agenda. It’s not enough to blame it on the students or the K-12 system; institutions must adopt programs that have proven to increase student mastery in these areas.
- Other countries have recognized the significance of research support, including removing bureaucratic barriers, in keeping and attracting top researchers. They are rapidly winning the battle for the best and the brightest.



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## Fact

**South Korea plans to reduce the number of national universities over the next two years from 50 to 35 in order to focus its resources and strengthen research capacity. Universities in Western Australia are planning on merging to create a 'super-university' with more research clout. Australia is proposing the creation of 24 new technical colleges.**

## Our Thoughts

- The Asia-Pacific region will only increase in its importance for higher education in the next 10-20 years, even if China and India weren't building capacity at a significant pace.
- Mergers and other efforts to focus research and increase tertiary institutions' ability to compete globally are clearly evident across the region.
- The Asia-Pacific Rim countries recognize that immigration will help them achieve these goals and they're acting accordingly. New Zealand's minister for research sees immigration as a 'talent-attraction' function. Canada has changed its immigration policies to allow international students to work during school and stay for up to two years after graduation.

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# Learning

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## Fact

**Research in an array of institutions has demonstrated that appropriately integrating information technology into large-enrollment, introductory courses can increase learning, retention, and access while reducing costs.**

## Our Thoughts

- Evidence for the efficacy of implementing learning technology is now indisputable. Information technology is now easy to use and clearly increases students' active learning and engagement with course material. Why isn't it more common?
- Some of the best programs are in science and engineering disciplines, the very areas where the US is most at risk of losing to global competitors. Perhaps it's time for federal funding directed not at research but at replication.

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## Fact

**Familiar music acts as a very strong memory cue, whether or not it's heard during recall. Presenting the lyrics, a photo associated with the song, or even just the song's title can trigger detailed memories.**

## Our Thoughts

- The power of music for learning is becoming increasingly evident from a variety of research. Memories of events and people are enhanced when they are associated with songs and music. How can educators begin to use songs more systematically to aid learning? How does higher education take advantage of this phenomenon, just as elementary teachers have for years in teaching the 'ABCs'?
- Is it time for faculty members to set their lectures to music and then to use the same music to accompany their course management notes?



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## Fact

**Adolescents, including college students, have different bio-cycles than children and adults. They experience a second alert cycle in the late evening and don't experience waking alertness until mid-morning. Some institutions are finally realizing that 8 AM classes are not an optimal time for student learning.**

## Our Thoughts

- Breaking the 8 AM to NOON scheduling block mentality is not going to be easy on campuses. Professors may prefer those adult hours, but students are able to learn more when classes are scheduled to meet their biorhythms—late mornings and afternoons.
- Residence halls can also be made more accommodating to student learning cycles by ensuring light blocking curtains and more sound proof walls. Think of them as places where many people are working the night shift.
- Nutrition needs also shift when we meet students' optimal learning cycles. Keeping nutritional food available into later evenings can add to students' learning capacities.

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# Politics

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## Fact

**Higher Education Act reauthorization may finally happen after a long and tortuous battle. For-profits are likely to be included in the definition of 'an institution of higher education'. Low income and minority students will lose ground as Pell Grants remain essentially flat, programs for minority high school students are eliminated, and technical education barely stays alive.**

## Our Thoughts

- Access to public education continues to grow more difficult. It's still difficult to tell if for-profit degrees will carry the same weight in terms of long-term economic success that is the bulwark of non-profit institutions' competitive edge.
- Higher education continues to garner more attention and negative press than ever before. Can campuses bring political stakeholders to the table and convince them that reducing funding and increasing accountability are not in society's best interests?
- Time and money allocations for lobbying have become a necessary expenditure for most institutions. Unfortunately, legislators wonder why more resources are not spent on students.

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## Fact

**The Bush administration wants the Patriot Act reauthorized and extended with virtually no revisions. Risk management experts are recommending that institutions conduct background checks on all employees.**

## Our Thoughts

- Global competition for scientists and engineers has greatly increased and higher education has been essentially bound and gagged by the Patriot Act. While fears of terrorist attacks have heightened in the aftermath of the London bombings, they



- have risen more in the US than the UK. Is it time we acknowledged that keeping people out of the US is shortsighted when we look at long-term economic security?
- Academic freedom is the hallmark of innovation and creativity in US higher education. Academics continue to be unsure of what's allowable under the Patriot Act when it comes to the sharing of ideas with non-US colleagues. Making those provisions of the Act less stringent could go a long way to reducing the fears of professors.

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## Fact

**The National Governor's Association survey of 2005 high school seniors revealed some discomfoting findings:**

- While they recognize the importance of their senior year, 49 percent of students indicate that it could be more meaningful, particularly in preparing them with employment and life skills. 29 percent see senior year as a 'waste of time'.
- 70 percent responded that teachers have high expectations only for 'certain students' and 30 percent say that high school has done only a 'fair' or 'poor' job of challenging them academically.

## Our Thoughts

- Setting high standards at a state or national level does not seem to translate into challenging and engaging educational experiences for the majority of students. Accountability is not meeting its promises, but legislators still rely on testing to push these agendas.
- The students entering higher education want to leave knowing they've mastered critical thinking, problem-solving, and communication skills—ones they didn't get in high school. What will institutions do to be responsive to these desires, that isn't just more of the same?

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# Technology

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## Fact

**Nearly half of rural K–12 districts offer some form of online learning. Over 2.6 million students took at least one online postsecondary course in 2004, a growth of 24.8 percent over 2003.**

## Our Thoughts

- Online learning, both synchronous and asynchronous, is here to stay. Students both on- and off-campus enroll in online courses to help them juggle work, social and family life, and course scheduling conflicts.
- Cost savings will not be likely until higher education institutions think about these courses as they do textbooks—someone else can produce them and we can 'sell' them and still meet our revenue needs. As long as every institution wants to create its own courses, it will be hard to truly meet demand.
- Physical campuses will not go away. They provide a role in socialization and learning that can't be replaced by electronic interactions—at least not yet.



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## Fact

**The top four issues for campus chief information officers included the implementation of administrative/enterprise resource planning (ERP) systems, funding for IT, infrastructure management, and security and identity management.**

## Our Thoughts

- While campuses have made strides in reducing the effects of viruses, worms, and spam, identity theft has increased. Protecting campus computers from external threats is not going to be enough for effective security management. Disgruntled employees and alumni join the hacker in attacking the integrity of campus information.
- Legacy systems are finally on their last legs in many places—nobody knows COBAL programming anymore. ERP systems are proving far more difficult to create and implement than anyone wanted. How will campuses that have not already moved proactively grapple with their clear needs for integrating their financial, human resource, and accounting systems?
- IT is no longer the darling of the legislature or trustees, so funding for ongoing upgrades and maintenance will continue to be difficult to procure. This is at a time when faculty members are finally really exploiting the power of IT in learning. The increasing costs of course management systems are only exacerbating the problem.

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## Fact

**Communities of all sizes are beginning the process of wiring/WI-Fling themselves. Cable and phone companies, the private providers, are fighting back.**

## Our Thoughts

- Wired communities help campuses serve their students, faculty, and staff who live off-campus. How can they support such efforts without alienating the private sector that may be big donors or have the ear of legislators?
- Access to the internet increases students' chances of aspiring to and succeeding in higher education. If we're going to serve our broad social agenda, we need to support communities in their efforts, including sharing our lessons learned in security.

