

Changes Facing Higher Education in the US: Implications for Institutional Research  
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Karen W. Bauer

Director of Institutional Research and Associate Professor, The University of Georgia

Hello. Thank you for inviting me to join you, and I bring you greetings from your colleagues at The University of Georgia, across the US, and the Association for Institutional Research (AIR). It is indeed my pleasure to be here.

My only regret is that I can not stay and visit your beautiful country longer.

When Dr. Sharma first contacted me and we discussed what I might talk about, my mind went to several subjects-- college students of the 21<sup>st</sup> century, US faculty and current teaching pedagogies, or maybe American football in the Southeast.

But our final selection of Changes Facing American Higher Education and Its Implication for Institutional Research couldn't have been better. Having spent nearly 25 years in higher education, I know it is my true home. I get excited when I meet with students in class, my daughters shudder when I get on a roll, and the dog hides under the sofa, but I know that my enthusiasm and comfort in the higher education is right for me.

In our short time here today, I'd like to talk briefly about several changes that affect American colleges and universities and how those changes impact me and my colleagues in IR. I'd like to organize my comments around three broad areas – changing demographics of students, accountability, and fiscal pressures, plus one additional topic that is critical to us all, data security. Based on my quick review of some of the articles in your *Journal of Institutional Research* and topics at this and other AAIR Forums, I'll let you decide, but I suspect you face many of these issues as well.

#### Changing demographics of students

Although there is debate about the diversity of American institutions (Morphew, 2005) American Higher Education currently enjoys the widest diversity of students ever. We enroll more underrepresented races (for example Black/African American, Hispanic, Asian) and fewer whites and in general, the diversity of students' backgrounds and cultures are beneficial to our majority students in broadening their perspectives. American colleges have many first generation students who also bring with them a limited but fresh view of, perhaps greater appreciation for, college. Greater diversity also means that more nontraditional students (those aged 25+) are enrolling in college. According to the American Association for Community Colleges, 46% of all postsecondary students are enrolled in community colleges, 65% of those are part-time, and have an average age of 29.

We are also experiencing a larger number of students who are not prepared for college level work, some community college or first generation, some 4-year or not first generation. Students with lower levels of academic preparedness require institutions to

offer more remedial courses and services, and in some cases may contribute to lower persistence rates and/or extending the time to degree for students.

American higher education enrolls students with increasing scores on ability measures such as the SAT (Scholastic Aptitude Test), and thus we might say that we enroll increasingly brighter students each year. However, we also hear reports that students may not be prepared well for math and science courses, or in some cases, they tell us they are not challenged by the academic rigor of the classroom. World reports show American students near the bottom on math and science tests. One might wonder if scores are truly increasing or are students becoming smarter in how to take the test or practice course prior to taking the test.

We also know that we enroll increasing number of students with psychological and/or learning disabilities. According to a report at Kent State University (in USA), 9% of college freshmen reported one or more learning disabilities. As you know, learning disabilities include reading and writing dyslexia, but may also include psychological and emotional dysfunctions. It's hard to estimate the extent of psychological disability because we only learn of it when an incident occurs. We do know, however, that many students and their parents openly tell us of the kinds and amount of medication their students are on. Learning disabilities and laws related to the American Disability Act require institutions to offer more services in and out of the classroom. In some instances this is easily rectified, but in some others when changes to physical structures are called for, limited budgets make this requirement an even larger challenge.

The issue of alcohol use among college students is indeed not new. Yet, the levels of alcohol use binge drinking, and use of other drugs continues to rise on American college campuses. One frequent survey used by American colleges, the CORE Alcohol and Drug survey reports that on average, 85 % of students report use of alcohol within the past year and 48% have participated in binge drinking in the past two weeks. I'm not saying that I oppose drinking per se, but I am concerned about the consequences that result from over use—missing class, vandalism, drinking and driving, and sexual assault.

Barrett Seaman, author of a new book on binge drinking argues that the tighter enforcement and raising the legal drinking age from 18 to 21 has only compounded the problem. Seaman argues that the increased age has had the unintended consequence of creating a covert culture around alcohol as the young adult's forbidden fruit.

Today's American college student 'front-loads' or 'pregames' before going out for a social evening event. This means they drink in their dorm rooms or apartments prior to attending an evening function, and often hard liquor in place of, or in addition to, beer.

The parents of our traditional-aged students, sometimes called 'helicopter' parents remind us of additional changes in today's students. Two scholars, Strauss and Howe (2000) have termed our current students the "millennial generation," and remind us that these are the students who have been sheltered and 'hovered over' since they were young. Parents of the millennial students drove cars with the 'baby on board' signs in the back of cars. They are the soccer moms who transported their children to team sports, awarded their children with trophies and honors for each success so that children developed high

self-esteem, they sadly watched the tragedy of the Columbine (Colorado) high school shootings, and vowed to do whatever was necessary to ensure comfort and safety of their children. Now with college students, these 'helicopter' parents continue to stay extremely connected to their children, serving as their advocate supreme, often to the point of intrusion on our college campuses. A decade ago we questioned the concept of *en loco parentis*, wondering if college officials were doing too much for students. Today, we see the parents involved to the point where they are not encouraged to make their own decisions.

One last point related to the demographics of today's American college students is simply the large number of them. (mention *Chronicle* article on AU getting largest number of foreign students.) According to the *Chronicle of Higher Education*, 16.6 million students are enrolled in American postsecondary education. Unlike our Western Europe counterparts, a larger percentage of 18-20 years olds pursue postsecondary education, and many today believe that the ticket to the American middle class is achieved through baccalaureate attainment, that the baccalaureate degree is a necessity, not a luxury. In 2005, the US population is in an upswing in number of 18 year olds, and therefore colleges are experiencing high demand for college. Many institutions feel as if they are bursting at the seams, finding it difficult to adequately apportion residence and classroom facilities. Some states such as Georgia, Florida, California, and Texas are experiencing proportionately higher immigration. This taxes state services and support in many ways while it also affects the college campuses, many of which propose to build new structures if and when finances are available. In addition, many colleges that deferred regular maintenance of facilities in tight budget times in the 1990s are now facing the consequences of that decision and face the even greater need for facility upgrades.

These changes in proportions and sheer number of students affects IR because, as the decision support unit, we are often called upon to provide data on the numbers of students, credit hours generated, graduation and retention rates, and much other information that can be used by senior officials. The need to understand the integration of academic, budget and facilities planning is critical. We can't house more students if we don't have the facilities. We can't equip classrooms with the latest technology nor supply materials for the library if we don't have the funds, and we can't recruit highly talented faculty and students if we don't have the best facilities and curricular programs. The IR professional's knowledge of and specific numeric data for these issues, and their interrelationships make us a valued part of our campuses.

## II. Accountability

A second issue affecting American Higher Education is something you are experiencing as well—increased accountability. Beginning (at least its last cycle) in the late 1980s, US colleges and universities continue to face public and legislative scrutiny. We still occasionally hear the critic who believes that faculty are 'fat and happy,' earning a big salary to teach one or two classes, leaving the majority of instruction to foreign teaching assistants, and students to fend for themselves, so the public perception, to some degree, is that faculty are relatively unproductive. This perception prompted

legislators and national officials in Washington DC to become more interested and involved. About a decade ago, some states were mandated to document and report on key performance indicators, with many states apportioning funding according to performance outcomes. With all due respect, state legislators may not be the most informed in determining performance levels, and thus some states learned the hard way that performance funding was not the best way to ensure academic quality.

While some performance funding still exist, I'm happy to say that some states such as South Carolina have discontinued this practice, and although performance-based funding may have declined, the issue of accountability has not. Like you, our institutions face the challenge of greater documentation of the teaching and learning process, and specific outcomes that result. At some institutions, I fear that the tail wags the dog—the accreditation guidelines prompt the implementation of certain assessment programs, resulting in the use of sparse dollars and time, sometimes without useful results. Happily, other institutions have found ways to address assessment without excessive efforts.

Across the US (and here in Australia I believe) accreditation plays a major role in our daily lives. At the University of Georgia, academic administrators put forth significant resources and efforts in accreditation and related assessment exercises including: regional accreditation (SACS, institution-wide), discipline specific assessment (such as for the business school AACSB, teacher education NCATE, engineering ABET), program review, dean's review, assessment of the major and assessment reports mandated by the University System office. I am happy to report, however, that my boss, the Associate Provost for Institutional Effectiveness recognized the multiple efforts as we are collaboratively seeking ways that we can meet the accountability needs more efficiently.

Again, like you, program and major assessment is a regular part of daily tasks for those at American colleges and universities. Parents, peers, legislators, and students themselves want to know what the acquisition of the degree will do for them. The Higher Education Research Institute's fall freshman survey finds that 71% of the new freshmen attend a four-year college so they can make more money and/or get a better paying job. 52% say that they want to attend college to find more purpose in their life but I wish that figure those figures were switched to there was less emphasis on the amount of money and more on internal reflection. (CIRP data in the *Almanac*, 2005).

In addition to major or program level assessment, US institutions have recently or are currently examining their general education program and how to document its effectiveness. A recent publication by the American Association for Colleges and Universities (AAC&U) reported that the vast majority of American colleges surveyed have recently or are engaged in General Education revisions.

Why such an emphasis on General Education?

I'm not sure, but there are a couple of forces that are coming together to make this a powerful punch. A few years ago, Ernest Boyer and colleagues spoke of the need to increase student engagement, especially in the research university, and this document prompted the introduction or increase in related activities. In addition we hear from

recruiters and employers that they not only want new employees with the bachelor's degree but they want those that can write, speak, and think broadly. The program of General Education that is integrated throughout the baccalaureate program can yield great benefits to students. The early support and quick intervention that comes through freshman year experience programs is followed by courses that emphasize critical and creative thinking, moral and ethical development, skill development in specific areas such as the sciences, and then synthesized through a senior year capstone experience and/or internship seems to be a good model for American students and schools.

Perhaps you'd say that we Americans coddle our students a bit too much, but based on my work with students over the past two+ decades and specifically my assessment work on General Education at The University of Delaware and The University of Georgia helped convince me that it's a good formula for student success.

Related to assessment, IR professionals are the key resource for providing specific numbers (number of faculty, students, credit hours, etc.) as well as serving as consultants on survey design and overall assessment methodology. So as you know, we provide data but also strategies for how to best collect data about our institutions and then how to summarize that data to inform us on how well we are meeting our goals.

### III. Funding and Staff Resource Issues

A third issue I'd like to address is the current shift in fiscal and technology issues. Not terribly new, US colleges continue to see declines in federal and state funding. About 10 years ago, The University of Georgia received more than 50% of its annual budget through state appropriations. That figure is now below 35%. Ten years ago, The University of Delaware received approximately 25% of its budget via state appropriations, and now that figure is down to approximately 17%. Some colleagues joke but say, "we've gone from a state-appropriated to a state-assisted to a state-located institution." The statement reflects reality for many, and this shift has prompted a need to look to other sources for funds. We have long discussions about rising tuition and the national focus on curbing the cost of education. Faculty extramural funding is critical and because there are more faculty searching for external funds, the competition for those dollars is higher. Especially at research universities, the battle between teaching and research continues and we often hear from faculty who don't feel that they can spend time on their teaching because receipt of external funds is necessary for their academic survival.

The forces of increased accountability and tight funding come together in an increased emphasis on faculty workload. Parents and legislators want to know that those 'fat-cat' faculty are working hard, and efforts such as The National Study of Costs and Productivity housed at The University of Delaware attempt to gather data and compare faculty teaching loads and credit hours generated by discipline so that some basic comparisons can be made across institutions. In addition, because funds are fewer, senior academic officials are interested in having the bulk of courses taught by full-time tenure-track faculty rather than adjuncts or graduate students. While the optimal mix of full-time to adjunct faculty for instruction varies, it is certain that this is an area of intense

study and one in which IR professionals are called upon often. A study that examines courses taught, credit hours generated, external dollars received, and outputs such as patents and publications are regular for me and I believe many of my US colleagues.

Tighter funding has also encouraged many institutions to implement a stronger enrollment management strategy. IR officials are often called upon to supply retention and graduation data, assist or administer admissions marketing surveys, and often asked to assist with statistical modeling of enrollment projections. Yield rates are important and strongly contribute to spending the institution's recruiting dollars wisely, yet changes in student demographics and academic preparation make such projections more difficult.

Related to admissions is that of immigrant student access to American Higher Education. Recently in the news, seven US states currently offer in-state tuition and fees to undocumented immigrants who wish to enroll in the state college/university system. While I strongly value and see the intergenerational benefits of the college education, I find it an interesting policy to offer in-state tuition rates to these applicants yet legal US citizens who live in another state must pay non-resident rates. We will have to see how this one plays out over the next few years.

#### IV. Data Security

A last issue related I'd like to address is the impact of technology and most importantly, data security. We all love our technology-- I find it hard to go anywhere without my cell phone and PDA, and our students nearly demand greater technology in their learning experiences. All of this is great, yet it comes at a hefty price. The costs to renovate a classroom for new technologies are high (in 2000 an estimate was \$35-50K per room) and in some cases, the technology is close to outdated before it even gets installed. And yet, I'll say that we want to ensure good cost return so we encourage faculty and students to use the technologies, and in general, that's a good thing.

Related to technology is our insatiable appetite for searching and storing information on the Internet. How many times have I or you been to the campus library lately? I have a wonderful and robust set of databases at my fingertips that I can access from any computer. The number of full-text articles I can access is incredible, thus my personal foot travel to the library is greatly diminished. I feel like an old curmudgeon when I say to my students -- "you have no idea how lucky you are -- you can access so much literature directly from your computer. No need to search through the stacks, pull out this abstracts manuals with tiny text...."

The advances in computer technology are extremely exciting, yet an interesting problem has emerged from this explosive expansion of the web in academia—the problems of identity theft and the need for data security. Especially in IR, we often collect and store sensitive student and employee data. According to speakers at a recent conference I attended on data security, computer hacking is no longer done primarily by the bright, nerdy student just to see if it can be done. Identity theft has become one of the most lucrative criminal ring operations, with the largest groups operating in Russia, Brazil, and

China becoming so. In a conversation with a professor from Purdue University in Indiana, he made an interesting comment. When asked how vulnerable colleges and universities are, he said – “well, Karen, think about it—if you wanted to access personal data where would you go – would you go to banks and hospitals who have spent much time and dollars ensuring tighter security, or would you go to a source that is relatively weak in its security? By their nature, colleges and universities are open—they are designed to open their doors (literally and figuratively) to the community, and as such they are easy targets for data breaches.”

In my own IR office, my colleagues and I spend a great deal of time (and me laying awake at night) discussing how we can best defend our data repository against security breaches. Financially, this is a challenge because current software and hardware is expensive and needs regular upgrades. In addition, current security procedures are in some cases one step behind, in others one step ahead, of hackers. Tremendous portions of staff time and dollars are spent on prevention only to find that hackers have created a new way to access data. Although IR offices may not store nor even have access to credit card or other financial data, or health records, we do have access to and/or store personal identity information for students and staff. Knowledge of federal laws that protect individual data (such as the FERPA, Sarbanes-Oxley Bill or Hippa laws) is critical.

Although I am by no means an expert on data security, I do not believe there is a perfect answer for protection against data instruction unless we just all want to turn our computers completely off. Short of that, several layers of protection, constant monitoring, and prayer are the strategies that I employ in my office.

So how do these issues affect Institutional Research professionals? As the decision support unit, we are called upon to provide data on many, if not all, of the above issues. We are in a wonderfully unique position to see the entire institution, and as you know IR professionals are somewhat unique with the set of skills we hold. I delight in having the ability to see all aspects of the college, yet I realize the challenges that exist to know deeply the institution, its culture, tacit assumptions, and unwritten rules. Among many challenges facing American Higher Education, there are four that I’ve highlighted today—changing demographics, accountability, declining resources, and data security. It is critically important that we anticipate and develop strategies and data collection systems for easy access to data on our campuses. Knowledge of the data elements is essential and something that I still tackle each day at my new institution. How I have come to appreciate my UGA IR colleagues.

Once we have access to and acquire the data, it is then imperative to know what to do with it. A combination of knowledge about the institution, issues in national and state policy, and how the institution can respond are important in knowing what issues to highlight. In the US, and I suspect here, Down Under, issues such as demographics of the student population, how an institution should respond to meet the needs of those students, response to accountability, fiscal pressures, and data security won’t be going away any time soon. I am honored to be part of a team of colleagues, very much at my institution, but with colleagues across the land as well, who find satisfaction in gathering

and providing information on the facets of our institutions. Indeed we have challenges ahead, but I believe we have the skills to face them, and I delight in the intellectual challenge, don't you?

Again, thank you for the honor to join you today and I look forward to a great conference ahead.

#### References

2005-06 Almanac. *The Chronicle of Higher Education*. Washington, DC.

Morphew, C.C. (2005). Reconceptualizing changes in institutional diversity between 1972 and 2002. Paper presented at the Annual Conference of the American Educational Research Association, Montreal, Canada.

Pressley, C., Southern Illinois University, CORE Alcohol Survey.

Seaman, B. (2005). *Binge: What your college student won't tell you*. Hoboken, NJ: Wiley and Sons.

Thomas, S.B (2005). *College students and disability law*. Accessed on October 22, 2005 at:  
[http://www.ldonline.org/ld\\_indepth/legal\\_legislative/college\\_students\\_and\\_dis Law.html](http://www.ldonline.org/ld_indepth/legal_legislative/college_students_and_dis Law.html)