



**Testimony of Dr. Mark Schneider  
Vice President, American Institutes for Research  
Subcommittee on Higher Education and Workforce Training  
Of the Committee of Education and the Workforce, U.S. House of Representatives  
September 20, 2012**

The nation invests untold billions of taxpayer dollars in its higher education system. Students and their families pour even more into a system that often is thought of as “the best in the world.” While clearly the nation has the lion’s share of the world’s great universities, we also support hundreds upon hundreds of campuses that are not doing a good job of educating their students, graduating them, or helping them find jobs—which, according to a recent study by the Higher Education Institute of California, is the number 1 goal of today’s college students.

Further, we have only rudimentary knowledge about how well all those billions are spent. We do know that the United States spends a larger share of its GDP on higher education than any other nation in the Organization of Economic Cooperation and Development (OECD), but we have only limited insights into which institutions are spending their money more efficiently than others and which are getting a higher return on investment for students and taxpayers.

Our inability to document student and institutional success all too frequently traces back to limits in the nation’s primary system of higher education data collection, the Integrated Postsecondary Education Data System (IPEDS).

IPEDS would be a pretty good data system for the 1950s, but IPEDS is flawed—perhaps fatally so—given our current system of higher education.

- When it comes to students, its coverage is too limited to represent the changing population of students enrolled in America’s colleges and universities.
- When it comes to capturing different aspects of student success in college, IPEDS measures far too few.
- When it comes to the crucial issue of how much higher education costs, IPEDS comes up short. Yes, we can use IPEDS data to tease out some rudimentary information about costs (thanks largely to the Delta Project started by Jane Wellman and now housed at the American Institutes for Research, where I work). But these insights don’t begin to meet our information needs.
- And when it comes to measuring taxpayers’ return on the investment (ROI), we have to make some rather heroic assumptions to even approximate what taxpayers get in return for the vast sums they invest in colleges and universities.

The nation can do better.

With that in mind, let me sketch some of the metrics needed to better measure the performance of our colleges and universities. I'll use four categories to keep it simple:

- Student success while in college
- Student success in the labor market
- Student learning outcomes
- Costs of higher education

I will hone in on what I see as the most promising metrics in each category and discuss some of their benefits and costs. Then I'll take on the issue of risk adjustment to allow comparisons across institutions that serve different student populations. I'll end by comparing the present regulatory mentality of the US Department of Education's approach to measuring student success in the labor market with a consumer information approach that I believe works better with the data we have and could make it easier to find and use not only data on employment outcomes, but other types of information on college performance as well.

### ***Student Success While in College***

Improving student success in college requires addressing three related processes: retention, progression, and completion. To earn a degree or a certificate, students have to stay enrolled (retention), they have to accumulate enough credits in a timely way (progression), and ultimately they have to finish school (graduation). We need far better measures of all three processes and we need to track more students than we do now. As is well known, IPEDS concentrates on full-time, first-time beginning students. Unfortunately, this group represents fewer than half of all students in the country. And even for these students, IPEDS' measures of student success are limited.

While IPEDS does report first-year retention rates for both full-time (and part-time) students, it doesn't tell us the rates at which students stay in school after their first year, it has no information on student progression, it doesn't count most transfer students, and it doesn't calculate student success metrics for many groups of students that are of central to the nation's policy concerns (such as recipients of Pell grants).

Slowly (and, we must hope, surely), we are making progress on fixing these problems. Most notably, the National Governors Association is leading states to endorse Complete College America's student success metrics that will allow us to more accurately measure the success of far more students enrolled in colleges and universities. That's because these metrics are based on student-level data (held by the states, not the federal government) that's much finer and more accurate and covers more students than IPEDS does.

One area of student success that CCA emphasizes is credit accumulation—an intermediate step between retention and completion. The aim of this measurement is to determine the proportion of undergraduates making steady academic progress during an academic year. Students can return semester-after-semester, but if they aren't completing courses and earning credits at a pace that will allow them to get a bachelor's within 6-8

years or an associate's degree in around 4 years, they will likely never graduate. Capturing the percentage of students who are progressing fast enough toward their degree is one measure to which IPEDS needs pay far more attention.

These kinds of student success measures are built on student-level data that most campuses and states should have and that can be compiled relatively quickly and relatively cheaply. Moreover, they can be produced now, without a long lead time. But the important CCA effort isn't broad enough. Over half the states in the nation now provide Complete College America with the expanded metrics, but these are on public institutions only and currently the data are not reported by at the campus or program level.

### ***Student Learning***

Higher education is about just that: educating students. However, the task of *actually* measuring how much college students have learned is just beginning to gain traction. Critics have long suspected that far too many colleges have not improved student skills. Richard Arum and Josipa Roska's book, *Academically Adrift*, elevated that concern from a back-room parlor game to a headline issue. Indeed, their work even made it into a Doonesbury cartoon!

Arum and Roska show that during their first two years of college, almost half of the students in their study did not improve in critical thinking, complex reasoning, or writing. Moreover, they show that students are distracted by socializing or working and that many colleges and universities put undergraduate learning close to the bottom of their priorities.

One of *Academically Adrift's* strengths is its empirical base. Rather than asserting that students are not learning, Arum and Roska used one of the new the Collegiate Learning Assessment (CLA) to measure students' cognitive skills. While the CLA has so far attracted the most attention, other assessments are available (such as the College Board's Collegiate Assessment of Academic Proficiency or ETS' Proficiency Profile test) and more will likely be coming to market as policymakers demand measures of the value added of college education.

My preference is for actual assessments of learning outcomes, not the less telling process-oriented studies such as the National Survey of Student Engagement (NSSE) and the Community College Survey of Student Engagement (CSSE). While some NSSE and CSSE questions are more valid on their face than others—for example, those on how often students wrote research papers or talked with faculty—overall NSSE and CSSE measure process, not outcomes, so their correlation with, say, graduation rates, is low.<sup>1</sup> There are questions about the cost of CLA (and other such assessments) and questions about how students approach low-stakes tests. But even more important are questions about the role federal government should play in college assessments. Within those

---

<sup>1</sup> For example see FALSE FRONTS? Behind Higher Education's Voluntary Accountability Systems by Andrew P. Kelly and Chad Aldeman. Available at: [http://www.educationsector.org/usr\\_doc/False\\_Fronts.pdf](http://www.educationsector.org/usr_doc/False_Fronts.pdf) and Assessing NESSE by Mark Schneider. Available at <http://www.insidehighered.com/views/2009/11/24/schneider>

constraints, Congress should nonetheless continue to monitor the progress of efforts to evaluate how much students learn and how much college helps them build their skills.

### ***The Economic Success of College Students***

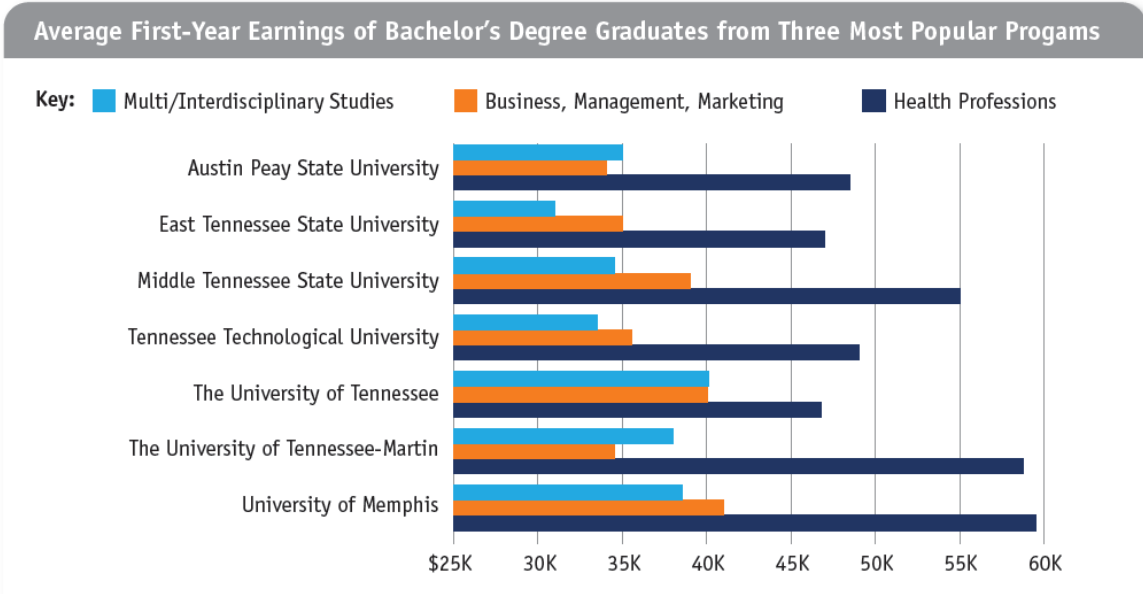
While improving measures of student learning and student progress are important, ultimately we need to assess the extent to which labor markets are validating the level and usefulness of the skills college students possess.

About half the nation's states can now link student-level data that document each collegian's experiences (e.g., major field of study) to unemployment insurance records that track post-school earnings and industry. These data let us compare the returns on the investment students and taxpayers have made in, say, a student with a bachelor's degree in sociology to those in a similar student who earned a bachelor's degree in English literature from the same campus.

Perhaps even more important, these linked data let us measure the returns to students with the same credential as those from different campuses. So students and policymakers can compare how successful students with, say, a bachelor's degree in materials sciences from one school are compared to students with the same degree from another campus. While higher education is about many other things besides labor market success, for most students, their families, and state policy makers, higher education is the ultimate economic development strategy. So all need to know how students fare after they graduate.

On September 18, 2012, I released data documenting the first-year earnings of graduates from programs across all the public institutions in Tennessee. These data document how much variation there is in the earning power of graduates from different fields of study—but the data also show how much variation there can be in the earnings of graduates from the same field of study across institutions.

As this graph from the report shows, there is a nearly \$15,000 difference in first-year earnings of bachelor's degree holders in health professions from the University of Memphis versus graduates from the University of Tennessee in the same area of study. A smaller gap, but still around \$7,000 in first-year earnings, separates graduates from the University of Tennessee in Multi/Interdisciplinary Studies from graduates from East Tennessee State. Note too that while Tennessee State graduates in Health professions lagged every other campus, their graduates in Multi/Interdisciplinary Studies were the highest paid, on average, in the state for students with this major. This reinforces the need for information about specific programs—success often is not uniform across programs or across institutions.



Tennessee data, not presented here, also shows how well many students with technical two-year degrees from community colleges do in the job market—often, their wages exceed those of students earning a bachelor’s degree. And, like the chart above, the data also show how much earnings variation there is between graduates of different community colleges in the same field of study.

Students and their families should have this information at their fingertips so they can make better informed decisions about where to enroll, what to major in, and how much debt they could comfortably take on relative to their likely earnings. Again, about half the states have linked their student- level data with the unemployment insurance wage data (an effort supported by the federal state longitudinal grant program). But while states *can* link these data, few states have made those linked data available to the public, to individual campuses, or their state legislatures.

I am working with six states— Arkansas, Colorado, Nevada, Tennessee, Texas and Virginia—on getting these measures of the economic success of graduates into the public sphere. The Tennessee data and an accompanying report were released September 18<sup>th</sup>. Arkansas data were released in August, and the Virginia data will appear in October. The data for Arkansas and Tennessee are easy to search and compare at [www.collegemeasures.org](http://www.collegemeasures.org)

***Cost of Degrees***

Finally, we need more accurate the cost of producing college degrees. And let’s not confuse cost with price here.

Most consumers worry about price and know little about cost. If we go to Wal-Mart to buy a roll of paper towels and the price is \$1.00, the fact it may cost 30 cents to produce is rarely on our radar screens. Consumer ignorance of cost is even more prevalent when government subsidies cloud the difference between price (what we pay for something)

and cost (what it costs to produce it). When we look at a highly subsidized service, such as higher education, the divergence between price and cost can be substantial. In short, a college diploma that carries a low price tag can cost far more than people realize. Any discussion of the cost of degrees must be attuned to their *full cost*, including taxpayer subsidies, and must be standardized by success (e.g., number of completions). Without taking both factors into account, we will be left with the false impression that a degree or certificate is cheap (because tuition price is low), even though it may not be at all when all costs are totaled.<sup>2</sup>

Furthermore, we know that costs are driven by such things as the mix between upper division courses versus lower division ones and the mix of majors—physics labs cost far more than French labs, for instance. And the mix of students and majors also may vary with each campus’ particular mission. Degree cost reflects all these variables.

Many accounting issues also need to figure in any discussion of degree costs. For example, how should we allocate spending on research and administrative support? We have little information on capital costs, which in many campuses exceed operating costs. In short, the budgets of most higher education institutions are both sketchy and opaque, featuring little of the true grist needed to even start tabulating what a student’s education costs taxpayers or how much campuses spend per degree.

We also have no reliable way of estimating how much the tax- exempt status of public and not- for- profit colleges and universities costs taxpayers. In more and more cities, conflicts are emerging between “town” and “gown” over payments in lieu of taxes (PILOTS). Fiscally strapped municipalities where tax- exempt institutions represent a significant share of their tax base (Boston and Providence come to mind here) are looking to campuses for some form of payment—but under current law payment is at the campus’ discretion. And tax- exempt institutions pay no income or sales taxes—in contrast to for- profits systems, for which corporate taxes are likely over 10% of revenues and sales taxes 1 or 2 percentage points. These exemptions are real taxpayer costs but are “off the books” so often go unnoticed.

Given these, and other related issues, we have no way of knowing how much taxpayers are investing in degrees through direct appropriations and through subsidies. And without an accurate cost accounting, it’s hard to begin to assess the rate of return to taxpayers for their investment in higher education.

### **Risk Adjustment**

Higher education institutions in the United States vary widely in their missions, the students they serve, and the resources they have to educate those students. Many argue that a “one size fits all” approach to any metric is unfair to the institutions that are serving “nontraditional” students—the majority of students in postsecondary education today. To compare students’ college or labor market success in a highly selective not-for-profit college or public flagship school to that of students in a regional public four-year campus

---

<sup>2</sup> See Who Wins? Who Pays? The Economic Returns and Costs of a Bachelor’s Degree by Jorge Klor de Alva and Mark Schneider. Available at [http://www.air.org/focus-area/education/index.cfm?fa=viewContent&content\\_id=1286&id=6](http://www.air.org/focus-area/education/index.cfm?fa=viewContent&content_id=1286&id=6)

is clearly unfair. One solution to this problem is to establish risk-adjusted metrics that allow us to compare individual campuses with their students' characteristics taken into account.

Risk-adjusted metrics are not a new idea. For example, hospitals' records are often compared using measures that take into account their missions and clientele. It's understood that patient populations in community hospitals vary greatly from those in, say, trauma centers. In higher education, we need some agreement on which student and campus characteristics need to be taken into account, perhaps starting with the risk factors that NCES has identified, but developing consensus around variables and methods requires more work. And we must take care so that risk adjustments don't let poor-performing campuses off the hook." A campus with a 25- percent graduation rate might have a "risk-adjusted graduation rate" of 35 percent, but is 35 percent good enough?

### **Consumer Information vs. Regulation**

Let's assume that over time we have better metrics to gauge our institutions of higher education's performance. Then what? The U.S. Department of Education's effort to regulate based on Gainful Employment shows the risks of getting too far ahead of the quality of the data.

As is well-known, a federal court ruled this past summer that the repayment ratio, one of the Department's three Gainful Employment metrics, was "capricious and arbitrary" and that no research backed up its 35% threshold for imposing penalties on campuses. While the Department's right to regulate on GE was upheld by the court, the current effort has once again hit a major stumbling block.

The problem here, I believe, is that the Department has been so focused on Gainful Employment as a *regulatory issue* that it has neglected an equally crucial role—getting the information it has collected into the hands of students and their families in an understandable format. The huge effort expended on the three regulatory ratios (debt to earnings; debt to discretionary earnings; repayment rates) meant that too little was paid to what is arguably the most important piece of information in the entire GE data release in June of 2012: the average earnings of graduates of covered programs. Indeed, I have been told that there was serious discussion about not even releasing earnings data at all!

While the Department of Education has made some moves toward making its data more consumer friendly, its Gainful Employment efforts missed opportunities to be more useful to students. For example, in its June 2012 release of the Gainful Employment data, it had a column of data labeled "debt to earnings annual rate denomina." In fact, this is the average earnings of graduates from thousands of programs throughout the nation. These earnings data contain valuable information not conveyed by the ratios. Here, for example, are the average earnings of graduates from four of the most commonly offered programs in California covered by the GE data.

“Debt to earnings annual rate denomina” (aka Earnings) for Four of the Most Common Programs in California			
Program	Average	Minimum	Maximum
Cosmetology	\$11,119	\$7,141	\$16,912
Message Therapy	\$14,339	\$8,306	\$21,034
Medical Assistant	\$16,257	\$8,951	\$27,175
Licensed Practical Nurse	\$38,838	\$20,340	\$68,871

Earnings data reported in dollar terms convey information understandable by most people. Ratios don't. Indeed, the regulatory-based ratios could easily lead to poor decisions: consider that for cosmetology, the average debt to income ratio was 3.6%, lower than any of the other programs shown above, and the maximum ratio was 11.8%, below the 12% “trigger” of the GE regulations. Yet, graduates of cosmetology programs earned far less than graduates from other programs.

Unfortunately, these simple dollar figures can be hard to find. The Department, as noted, unhelpfully labeled them “debt to earnings annual rate denomina.” And the entire Gainful Employment data base was released as a “flat file” consisting of almost 14,000 lines of data, so locating a program or comparing programs across institutions isn't for the faint of heart. That's why I created a far more user-friendly interface that can be found at <http://collegemeasures.org/gainfulemployment/>

Clearly, given the amount of taxpayer money invested in our colleges and universities, the government has an interest in making sure that the money is not spent frivolously. And the rate of return on both student and taxpayer investments in higher education matters a lot. The problem is that most of the data we have now are not precise enough to let us pick firm cut-off points fairly—to, for example, justify disqualifying a school with a repayment below 35% from participation in Title IV programs but not a program with a 35.1% repayment. However, if we view these data as informing consumer choice and seek to create reliable tools to allow students, their families, and their government representatives to view these data within a comparative framework, we can increase accountability by empowering consumer choice.

### **Reauthorization of the Higher Education Opportunity Act (HEOA)**

Measurement of student success can be improved and IPEDS can and should be modernized. HEOA provides such an opportunity. Some of the issues touched here may require more time to resolve and may need to be addressed outside of HEOA. (For example, some of IPEDS' value in documenting higher education finance is limited due, at least in part, to shortcomings and differences in GASB and FASB). Assessing student learning is a step too far for Congress to undertake given the current state of the science of assessment and given legitimate concerns about the scope of federal intervention. However, we can and should improve our measurement of labor market outcomes, and Congress has the right and the obligation to ask what hundreds of millions of dollars in



state longitudinal grants has bought us in terms of information that helps students, their families, and taxpayers make the right to decisions about higher education.

###