

# **SHEEO POLICY CONFERENCE**

## **HIGHER EDUCATION IN 2025**

**August 8, 2013**

Anyone who speaks immediately after lunch has two major tasks. The first is to lull the audience into a nap-like stupor in order to aid digestion. I have gotten really good at that and commend to you my voice as a proven sleep aid. The second is to jar the audience back to life so that they can face the exertions of the afternoon. In other words, after-lunch speakers have to perform a rhetorical version of Haydn's Surprise Symphony—and do so without benefit of brass instruments.

2025—that sounds a long way off. I can remember as a child thinking about the year 2000. I was convinced that every person would get around by using a jetpack and space travel

would be as routine as going to the corner grocery store. My beliefs were shaped largely by Buck Rodgers serials and Life Magazine spreads about the 1939 New York World's Fair. But they were reinforced by the fact that everyone I knew, children and adults alike, was enthralled by this same vision.

Well, 2000 came and 2000 went and I still don't have my jetpack. Space travel has occurred—but not for most of us. So, the vision was wrong. Well, sort of. When I believed that vision, humans and their machines had not yet penetrated into space at all. And I recently read an account about gadgets that sound a lot like jetpacks. So, the vision may have been right but the pace of change may have been a bit slow.

One of the lessons of future predictions is that you can be roughly right about trends and

directions but precisely wrong about specific technologies and timeframes.

The vision also must be adjusted a bit for realities. When I was young, social media meant the landline telephone. And, really, even 15 years ago that still was true. So, change can happen rapidly, building on advances and taking them in different directions than their authors had envisioned. Would the developers of the web, those geeks of DARPA net, ever have conceived Facebook? Well, no. But their work can be tied directly to the social media of today.

James Martin, the 1980s guru of technology confluence died recently. But his insights on the way technology would evolve and how business and society would use it to operate differently have proven prescient. So, emboldened by Martin's example, I am willing to envision a future a prudent person might shy

away from. But I will start with familiar truisms—things we know or think we know. And so I will remind you that:

Never before in history has such a high premium been placed on educational credentials. Craig Barrett, once of Intel Corporation, emphasizes that his former company will hire talent anywhere it can find it—regardless of city, state, country, or even continent. And he notes that the economic vitality and success of any locale or country will be tied directly to the educational attainment of its adult population.

A generation ago, no adults in the world were better educated than were Americans. Today, although educational attainment in the U.S. has not declined, many other developed countries boast a better educated adult population and, hence, workforce, than does the United States.

It is against this backdrop of static degree achievement that President Obama and Lumina have exhorted us to take action to again become the best educated people in the world.

The climb will be steep and many millions more Americans will need to earn degrees and credentials. But the goal, as important as it is to organize our efforts and impel us to action, is but a piece of the puzzle we must solve if we are to enable our citizens to be successful participants in a highly competitive global, knowledge-based society.

Among the other pieces of the puzzle are dimensions of demography that go beyond numbers: poverty, language, and ethnicity.

Colleges and universities in the United States educate millions of students and grant millions of degrees each year. They do this using an education model honed and refined on

American soil for nearly four centuries—a model that started as an imitation of things English, adopted things German, and then itself became the standard for the world’s postsecondary education.

That model has done a reasonable job of educating at least some American students—those from middle and upper income English speaking white families.

But American students of the upcoming decades will not look like those of the past. Increasingly, young people in this country come from families with low incomes who often do not speak English at home and who are black, brown or golden. If demography truly is destiny, America’s destiny is multi-hued.

Most of our institutions have a gap in achievement between their white students and their students of color, between their students

of means and their low income students, between their students who come with fluent English and those whose English is more rudimentary.

We know this, we bemoan it, and we try all kinds of strategies to address it—with varying degrees of success.

But the common denominator of these strategies is that they cost more than do our standard approaches to educating students.

Despite a small uptick in state support for public higher education this year, funding per student is not likely to approach the amount we received in the past. In response to steep reductions in state support in recent years, public colleges and universities have increased their tuition markedly.

As the public outcry and political pressure grow for tuition restraint, it is apparent that we are reaching the limit of what the public is willing to pay and have exceeded the amount that lower income families can afford. A strategy of spending more to improve results will not work.

Part of the uproar about college costs stems not from the costs themselves but from a perception that college is no longer a good investment. Part of that perception comes from the dire state of hiring that greets new college grads—a phenomenon that already seems temporary and one that has been the boon companion of recessions for decades.

But part of that perception also comes from the massive cost shift that middle income families have seen as states have reduced support for public colleges and universities, who have raised tuition to offset (in whole or in part) the gaping holes in their budgets left by state

abandonment of a post World War II compact among states, the federal government, and families in which states supported institutions, the federal government supported families with financial aid, and families and students found ways to pay what amounted to lower prices for college than for daycare. The end of that tacit compact is causing pain for families across America and fuels the political impetus for tuition restraint and university bashing.

So, to review: a competitive global society demands higher levels of skill and education than ever before in human history; American education levels have remained on nearly the same plane for 40 years; the education levels of other countries are eclipsing those of U.S. residents; leaders are calling for a much larger share of American adults to earn degrees and credentials; the pool of possible American students who could earn such degrees comes disproportionately from groups of residents

with whom our colleges have not been very successful; state investment in higher education has plummeted and is unlikely to recover fully; the federal government is more focused on deficit reduction than on investments in the nation's future; the students of the future cannot afford the prices colleges are charging; colleges have tried to improve success by adding costly new services and programs for which there is no revenue; and Americans are questioning the value of higher education—largely due to perceived unaffordability.

That's a pretty daunting set of challenges. I got tired listing them and I am sure you were exhausted by listening to them.

So, how will we, as American higher education, surmount them and enable our students and our citizens to succeed? Or should we just give up and wait a generation for our international

competitors to age out and give us another chance to catch up? After all, many of our businesses transcend national boundaries and succeed by hiring other countries' citizens.

But, of course, that approach would be to admit defeat and abandon the hopes and opportunities of a generation of Americans.

Back in the last century, when many of you were like my two-year old: young, open to adventure, learning constantly, and full of immortality and optimism, I taught a course in the history of American higher education.

Teaching that class taught me something about American higher education, about us: we adapt, we are resilient, we can and will be different to meet the needs of the times even as we hew to the traditions of preserving, transmitting and advancing knowledge.

For the first two centuries after Harvard's founding in 1636, American colleges and universities were few, until 1792 they were all private, and they trained a relatively few white men of property and privilege for the "learned professions" of medicine, law and the clergy through a curriculum that was still hallowed as a classical education when I was a student.

The westward expansion of the United States began in real earnest as the country sought to strengthen its hold on the vast territory Napoleon sold us to help finance his wars in Europe, bringing with it challenges never before confronted by modern people: how to unite and exploit a vast continent as a single polity rather than as small fiefdoms. How do you make vast tracts of isolated and sparsely populated land, separated by distance and physical barriers from the centers of economics and politics, a part of a unified nation?

The 19<sup>th</sup> century American answer was, really, a technological one. Advances in agricultural equipment and methods, in railroads, and in canals began the process that finds its contemporary expression in the web and in computerized additive manufacturing.

But leaders as soon as the 1830s saw that these advances demanded a higher level of education and skill than generally prevailed in society. By 1862, with the passage of the Morrill Act establishing land grant colleges, the national government made it public policy to educate its people to master the practical arts of agriculture and engineering.

Following the Civil War, most states established public universities to take advantage of the federal government's largesse and other states designated one of their existing universities to take up the land grant mantle. The rise of American public higher education, always seen

as a responsibility of the states due to the reserved powers clause of the Constitution, was largely the result of federal policy and federal resources. Essentially, the states took on the responsibility for achieving a national priority.

The next transformation in American higher education took place with the influx of returning World War II veterans using the payments they received under the GI Bill. Paying for college instead of paying for unemployment was the inspired choice the nation made as it demobilized 16 million soldiers and sailors in 1945 and 1946. The democratization of higher education built the talent pool that sustained American progress for more than a generation.

Investments in the 1960s expanded that opportunity to millions more Americans as the country sought to outpace the Soviet Union.

College was becoming a birthright of the middle class rather than a privilege for the wealthy.

Community colleges extended postsecondary education to more people and the benefits of college began to be felt by those of lesser economic advantage and from groups of citizens who had been overlooked in previous higher education expansions—particularly those from communities of color. In fact, national policy established financial incentives, such as the Pell Grant, to lure more and more Americans into college.

But by 1980, a countervailing force was introduced into American society, that of tax reduction and the end of the government expansion that had characterized the nation for nearly a half century. Proposition 13 in California, the tax cuts of the Reagan era, and a host of tax limiting measures in many states signaled the end of an era in which government

investments were seen as spurring the forward progress of society, the economy and family well-being.

Accompanying that sentiment were reductions in state support for public higher education. By the 1990s, in many states, recurring reductions in state support were the budget norm—a condition that spread to almost every state by the time of the 2008 recession.

But these reductions have been accompanied by a general understanding of the necessity of college for most adults and, therefore, rapid and sustained enrollment growth.

That is the hope-filled starting point for where I think we may be going. We must find ways simultaneously to lower costs, improve learning and expand success for millions more students than we ever have served before. Lumina says we need to award 23 million more high quality

degrees and certificates by 2025 than our current production model will provide. We must award them to students whom we have not done a good job serving in the past, at a lower cost and with better learning outcomes than we ever have had before.

We must educate one student at a time in ways that ensure the success of that individual student. And we have to do that in a personalized way tens of millions of times.

That is the education challenge that faces all of us, all our states, all our colleges and universities, and, increasingly, a host of other education content providers.

If someone were to ask me if MOOCS were an answer to our education challenge, I would say yes. If someone were to ask if badges will play a role, again I would reply in the affirmative. If

someone posited that the role of faculty will change, I would agree with that, too.

In fact, there may be few innovations in education delivery, assessment and certification that will fall by the wayside over the next twelve years. They all will play a role in helping us as Americans to fulfill our goal and meet the imperative of educating more citizens more successfully and less expensively than we now believe possible.

Along the way, we will call into question some of the most sacred tenets of our current higher education system: the primacy of the autonomous institution, the role of faculty, the certification monopoly of colleges and universities, what we mean by learning, who delivers education and how, and a host of others that none of us can now envision.

In the world of 2025, much of what we know and think we know will prove outdated. In the best tradition of American higher education, we will transform to meet the challenges of a new time using new ideas and new technologies to ensure the preservation, transmission and advancement of high quality knowledge.

2025 will look both radically different from and hauntingly the same as 2013. We still will have campuses. And a few of those campuses, those with money and prestige, will look, feel and be a lot as they are now.

Students will be both younger, as they achieve more college level learning in high school, and older, as we try to meet the needs of working age adults, especially those who have tried some college in the past.

The federal government's principal investment will remain financial aid: variants on the grants,

loans and tax credits with which we have become familiar. But instead of an exclusive focus on access, making college available to wide swaths of the population, the national priority will be on the achievement of credentials.

Mostly, that will mean payment upon completion of courses or programs, where students pay costs up front with savings, loans, earnings, grants from states, or other sources, with federal funds paying for costs after the students have demonstrated success and commitment. States will focus attention and funding on completion instead of on enrollment or legacy support of institutions and will move some of the appropriations they now use to support public colleges and universities to grant aid for students, with that shift especially prevalent for upper division and graduate students. A new partnership between the states and the federal government will thus

preserve student access while spurring greater student success.

The Ivys and their public flagship counterparts will have both the resources and the luxury of harnessing the future differently than will their less well-endowed colleagues. Their faculty will be the stars in an education firmament as well as the gods in the research pantheon, often being the named instructors of courses offered everywhere and to everyone. Their names will lure students to their courses but not to their institutions, whose on-campus students are likely to come through an ever more selective talent sieve (but one that must be less skewed to high income students than at present).

But these paragons of prestige will educate directly an even smaller proportion of Americans than they do right now, limited by their pursuit of a traditional academic view of excellence, the value of exclusivity in the

marketplace, and the desires of their institutionally conservative faculty and alumni.

The average cost of education will be driven down by changes in pedagogy and those changes will lead to alterations in the roles of non-elite institutions.

Mergers of colleges, both public and private, will become common as institutions strive to find viable academic niches and alliances to permit them to sustain operations. Others will share services, courses, and faculty with one another—often bridging between public and private institutions.

Community colleges and regional universities (especially those in population centers) will provide access and services to the place bound and low income residents of their areas. But, increasingly, the role of faculty and staff at those institutions will become the provision of

tutoring, advising, technology assistance, learning and competency assessment, mentoring, and other services that are wrapped around content that students acquire elsewhere: from high schools, from MOOCs offered by the star elites of the prestige universities, from the internet, from structured content providers who grew from the seeds of the Kahn Academy, from vendors of adaptive learning products (who may themselves be universities) that let students advance as they demonstrate mastery, and from crowdsources—the thousands or millions of people who know (or think they know) something about a topic. Some students will seek to master these themselves but many will need the mentoring of “expert” faculty from community colleges and regional universities.

Companies and individuals with special needs or special expertise also will enter the educational space, offering programs or

courses of interest and importance to them for personal or business or social reasons. And these providers can be people or organizations around the corner or around the globe or existing in cyberspace only.

Anyone can be a provider. Everyone can claim opportunity to educate. Although that is true today, in 2013 we still cling to notions of faculty and institutional expertise because for centuries we have invested faculty and colleges with the mantle of “official education” which carries with it the exclusive remit from society for educational quality, orthodoxy and an acceptable way to validate new ideas.

The wisdom of the crowd and the ubiquity of the internet are eroding higher education’s bastion of exclusive control of its traditional missions of preserving, transmitting and advancing knowledge.

So, if universities and their expert faculty no longer are the sole determinants of educational truth, who will be invested with that role? For SHEEOs and their agencies, this is a crucial question as you and your offices struggle to approve high quality education providers and protect students from providers whose quality is suspect.

By 2025, higher education's iron lock on certification, on the acceptance by society of the meaningfulness and general applicability of the traditional degree for almost any purpose, will be chipped and loosened. It will not yet be fully broken but its hegemony will be in serious jeopardy. Supplementing it, and in some areas, supplanting it, will be alternative certifications that increasingly will be accepted by segments of society (industry groups, professions, businesses, governments, people generally) as being as good as or even more pertinent than a college or university degree.

Who will define, measure, and certify quality and meaning? Of course, colleges and universities will be among those who will do so.

But what of the credit aggregator, the assessor of competencies, the awarder of badges?

What will be the effect of stackable credentials? Will the disparate “merit badges” of a boy scout model lead somehow to society agreeing that at some point their accumulation has academic, commercial, or social value?

And, if so, who will serve as an analog to the scoutmaster as the certifier of accomplishment?

These are not questions solely for institutions to answer. They will be vying with a host of competitors for the honor of being recognized as the certifiers of learning, of achievement, of competency. Society is likely to continue to accept college and university certifications in

some fields but not in all and it seems unlikely that these institutions will hold exclusive dominion over the terrain of certification.

But who will have the credibility and authority to define quality and what constitutes a certificate or degree or other credential?

In the past, that has been the exclusive province of colleges and universities. The external protectors of quality have come to be the regional accreditation agencies that are seen to assure a kind of minimum threshold of quality. If a college or university is not accredited, its students cannot receive federal financial aid. But there is no gradation of accreditation. An institution is either accredited or it is not. Even if it is on a probationary or warning status, and, (as Under Secretary Kanter noted yesterday) even if it graduates just 5% of its students, it remains accredited and can use federal financial aid.

Despite efforts in recent years to inject learning outcome assessment and other measures of quality into accreditation processes, the current model does little to serve as a warranty of quality. So, students, employers, and the public are left to guess about the quality of institutions and the effectiveness of the educations they provide based on general reputation and indirect measures obtainable from college and government websites and the rankings by publications whose own methodology may be driven more by inputs than by outcomes.

A challenge for the accreditors may be one of redefining their role as weighers of quality and certifiers of learning. They may need to adopt outcome thresholds, methods of measurement, and ways to assess and report the quality of learning and achievement that differ greatly from the indirect measures used today. That

could establish the benchmarks against which external assessment entities use their own instruments to determine whether the learning that students have, from whatever the source of that learning, merits a credential. This demands more transparency, more clarity, and more rigorous and open assessment and reporting than have typically characterized college and university degrees.

In 2025, there will be many education providers—but the providers may not be the certifiers of achievement and the awarders of credentials. Instead, external certifiers may be asked to assess and award credentials for learning and achievement that students bring from a variety of sources. How and when society accepts their certification as valid is open to question. Colleges and universities certainly could seize this role for themselves—after all who is better positioned to define and assess learning than are faculty? But faculty

roles and institutional culture and practice must change if they are to do so. If they are unable to take advantage of this opportunity, it is likely that society will accept the certification of other types of organizations as being a valid assessment of achievement and learning.

In that world, what is the role, what is the work, of the states' SHEEO agencies, charged in our federal system with oversight of a state responsibility to execute on a national priority in a global educational marketplace?

While all this seems a bit daunting, I believe it is a necessary condition to any successful effort to raise the education attainment level of enough Americans to meet the targets of President Obama or Lumina. Achieving those goals demands that we change not only how we educate students but how we define, measure and certify success. We cannot afford to reach our goals just by expanding our

current approach. We must find ways to reduce the cost of high quality higher education and the prices we charge for it.

I am convinced by our history that, as staid as American higher education seems, we will respond successfully to these challenges and to the many others that accompany them. We have done so before. We will do so again, reinventing ourselves as for centuries we have reinvented the world of ideas.

But whatever we do must be true to the values of the academy—values of honesty, integrity, inquiry and skepticism, values that have led the world to recognize American higher education at its best as the world's best. We cannot sacrifice that birthright of academic rigor and quality for expedient achievement of a numeric goal, no matter how laudable. Because, in the end, it is learning that matters and quality that must prevail.

Students are the key to our future, the key to our success as a nation and as a society. Their learning, their achievement, is our responsibility. As educators, as regulators, this is really the job and the challenge we face.

Sheeo policy conference—keynote 2013—  
version 6