Elitism, Ideology, and Pragmatism: A US Higher Education Perspective

John V. Lombardi

A keynote presentation for the Conference on
Neo-Liberalism and Public Higher Education
Julian Samora Research Institution
March 27-28, 2015
Michigan State University, Kellog Center

American universities find themselves in one kind of crisis or another with such frequency that we often see it as a permanent condition. This state of affairs serves as a constant reminder that higher education in America is something of great value, sought after by large segments of our population, serves a remarkably wide range of purposes, and symbolizes a broad spectrum of often conflicting values. We find the conversation about what out colleges and universities should do frustrating because the focus of interest, complaint, triumph, or despair tends to blur and shift depending on the time, the place, the observer, and the ascendant ideology.

We are reluctant to define what we mean by higher education. Do we mean the institutions (the colleges and universities), the students (undergraduate, graduate), the content (history, political science, engineering, or business), or the context within which we provide it (residential campus, commuter program, electronic mediated learning)? Are we interested in providing individuals with an opportunity to improve their economic standing? Or do we want our children to achieve economic success greater than our own? Do we see universities as engines of national and international competitive preeminence and expect American research universities to continue to dominate the world's innovation and discovery? Do higher education institutions serve a public or private purpose? Do these institutions support personal aspirations or serve business and commerce, politics and ideology?

America's triumph is that all this falls within our post-secondary experience. The world is a complicated domain with endless challenges of its own, but when we seek prosperity, peace, justice, and contentment we often turn to higher education. Everything we find wonderful or disturbing about American colleges and universities finds its expression in one or another institutional form. If we want to criticize, we can find easy targets. If we want to extol triumphant virtues, we have perfectly useful examples.

Indeed, one of the primary achievements of American higher education are its extraordinary variety and diversity, its multiplicity of institutions and providers, its complex structure of finance, and its overall success that serve as a target for international competitors. Nonetheless, in spite of the remarkable success and stability of the American higher education enterprise, change, challenge, and crisis remain constant elements that motivate, threaten, and energize innovation and reform.

The Universal Theme of Money

Some themes are universal. Money matters and it matters at all levels, at all times, and for all participants. It does not matter the same way for everyone, and the impact of financial issues varies by

time and place, but money is at the baseline of American higher education issues. Partly this results from the historical development of the American higher education enterprise.

We are creatures of a highly distributed and individualized financial system in support of post-secondary education. From the first sectarian colleges of New England to the land-grant universities of the late nineteenth century, from the dramatic growth of post-World War II student numbers to the 21st century technologically-enabled instructional businesses, America has invented a diverse ecosystem of post-secondary education.

The US government, unlike its European counterparts, is weak in its ability to direct education at all levels, for education in America is primarily a state not a national service. Absent clear national control, political actors at all levels seek to direct higher education through mechanisms of subsidy and regulation. Public funds allocated to particular purposes influences the behavior of theoretically independent institutions, and regulatory systems for college and university operations standardize higher education for particular purposes.[1]

Overseas, many countries that seek to compete with the United States' heterogeneous higher education structure operate on centralized system of education and allocate resources in accord with national level policies and processes. In the US, however, we operate thorough a marketplace of higher education, where funds for the various purposes we pursue come through a competitive process.

This element of market-based competition is fundamental to the form that American higher education has taken. Our institutions, of whatever type and style, compete for financial resources from many different sources. Some of the marketplaces are national, such as the research programs of the federal government. Others are entirely local, such as the competition for state tax-based funding for public and to some extent private institutions. We compete locally, nationally, and internationally for students, in part to ensure quality academic institutions but primarily to make our budgets. Absent sufficient numbers of paying students most institutions, private or public, profit or not-for-profit, would fail.

Given the importance of the money, any effort to reform or defend some element of higher education must closely follow the ebb and flow of funding that drives this American industry. When we or anyone else wants something to happen in higher education, we and everyone else turns to the money. Much of the change in American higher education results from shifts in the sources of funds sustaining academic enterprise.

Today, in the public sector, we struggle with the dramatic and now relatively long term, trend of declining public funding. With ups and downs driven by the larger economy, state budgets for higher education have fallen, then risen, then fallen again, in a stair-step downward trend. We fall, only to rise again, just not as high as before. As other consumers of state tax dollars crowded out investment in higher education (such as prisons, roads, economic development, social services, health care, or tax reductions), we increasingly turned to various forms of market driven, aggressive price management focused in large part on student tuition and fees.

Ideology of Educational Benefits

This shift in the funding required an ideological re-framing of our purposes and mission. Where once we focused on the service we provided to a nation on the move, and saw in the expansion of our public

institutions the development of an educated and prosperous population capable of sustaining American prosperity and preeminence over time, we gradually came to see our work as benefiting individuals over the short term. [2]

If schooling produces substantial personal economic benefits to individuals as well as substantial value to society, the new argument went, the individual benefited should bear appropriate portions of the costs. Many of us find this re-framing uncomfortable, especially for public higher education, but our fiscal challenges have been so significant that we no longer spend much thought on the principle of tuition payments and focus instead on the appropriate relative portion of funding that should come from individuals.[3]

As this conversation has advanced over the last generation, we built a sophisticated rationale for the shift towards private, individual investment in education. Our social scientists and economists conducted studies showing the lifetime return to higher education, demonstrating clearly that those who acquire a college degree will reap significantly greater personal economic rewards that those who do not. We use this rationale to justify the constant tuition increases made essential by declines in public funding. We look to our private college counterparts as examples of this strategy, since many fine liberal arts colleges and private research universities have thrived for generations on a diet of significant individual tuition along with other private investments. We have successfully transitioned America's public colleges and universities into fully market driven businesses benefiting, like many other American commercial enterprises, from a variety of tax-based subsidies (principally government subsidized loans and other financial aid) but sustained by their ability to attract paying customers.

Our arguments today turn on calibrations of the appropriate price to individuals for the benefits of a post-secondary education to them and to their employers. We have a wide range of tuition assistance plans for particular subsets of the college marketplace to fulfill various social or political purposes. As we do so, we also reinforce our commitment to the market-based model of higher education. Our students have become direct consumers of educational services and they, like all consumers, seek the highest and quickest return for the lowest price. The shift to education as a consumer product carries with it the notion that colleges are responsible for not only the quality of education but also the success of the educated. We want college, like other consumer products, to function in a reliable and predictable way.

Traditionally, we might have imagined college as an opportunity made available to individuals in search of an education, rather than a purchasable product. The result of college, we thought, depended on the provider offering quality educational opportunities AND the consumer making effective use of those opportunities. If students came poorly prepared, did not study, and then failed, we saw them as personally responsible for this outcome. But once we agreed that students purchase an education from a college (with their tuition/fees and a subsidy from other sources on their behalf), the colleges as producers become responsible for successful outcomes. The shift in responsibility from student to institution is energetically implemented by various states and the federal education establishment under the rubrics of accountability and completion.

Completion is the code word for guaranteeing the results of a college experience in the form of a degree or certificate. The notion fits well within the notion that colleges are primarily producers of a reasonably competent entry-level workforce with certain basic certifiable skills. State governments eagerly endorse this notion as they shift the responsibility for the consequences of declining revenue to

colleges which crusading private foundations seeking to transform colleges into skill-based training institutes welcome. The tools for achieving these goals require national standards of employable skills, universal standardized testing, and guaranteed completion and graduation for consumers. [4]

Market-Based Competition in American Higher Education

Some who observe American higher education imagine that this focus on money and markets is new, the attendant ruthless competition is a recent innovation, and the emphasis on commercial utility of higher education degrees reflects a change in our approach. While we may be more explicit about competitive goals than in the past, America's colleges and universities have always been both competitive and focused on the commercial marketplace for their graduates. We need only look at the land-grant institutions whose charters and purposes are directly linked to preparing students for business and industry and to pursuing research that serves agriculture, engineering, and commerce.[5]

Buried in the DNA of almost all public and private institutions, this is not a recent innovation. We train students to be productive members of society, and while some will surely become teachers and social workers, others will become accountants, corporate managers, engineers, stock brokers, nurses, and other members of technically proficient professions. We teach them to be nurses not only to care for the sick but to serve the health care industry and earn competitive wages. This is not new. That we find ourselves challenged by those who hire our products may well offend us, but we have no place to stand for we have been cultivating business, industry, and government as prime consumers of our educational products for generations.

While it is perhaps possible for a few humanists and social scientists to live in ivory towers, everyone else has a history of attending meeting after meeting with industry advisory councils to ensure that what we teach is what the marketplace wants. We track what happens to our graduates, and if too few of them get jobs, we are mortified and seek solutions to the ineffective production process that turned out unemployable people.

Fortunately, in spite of some overheated rhetoric from various quarters, most college graduates get jobs and do fine. The unemployment rate for college graduates is vanishingly low, and some of the complaints about the quality of our products have now turned to complaints that we do not produce enough of them. [6]

All this is not to say that what we see around us today is good news, that the university is in good shape and that we should not worry. We should worry because our history has not prepared us well to engage in full time, competitive, commercial warfare. We still carry with us a memory of a political leadership that saw universities as serving the public good and deserving of continuous stable support. As we struggle with the market and the changes the market continues to bring to our business model, we can identify elements in our institutional portfolios that serve to illustrate what matters today in higher education.

The Research Imperative and the League Tables

Let us take research. This is the quintessential product of the elite American university (whether public or private). Research identifies the elite university. Research is not, however, an abstract exploration of interesting phenomena, it is a competitive product. The American research university is a quality

engine that competes with others of its ilk to generate the most and the best research products the marketplace can define. This competition is exceptionally well developed in the United States and focuses on funded, peer reviewed, and published research. [7]

This is a ruthless system training competitors to develop proposals, secure funding, do research, and publish results in prestigious journals, and then, to repeat the cycle as frequently as possible. The researchers themselves invented and mostly manage this self-referential system through peer review panels for research and its publication in prestigious journals. While the federal government, foundations, and some commercial enterprises can influence this process by adding or subtracting funding or by identifying areas of study, the researchers themselves run the quality research competition.

This process has internalized a commitment to competitive excellence, not excellence defined as an abstraction relative to values or philosophies, but excellence defined through the operation of a sophisticated marketplace. One only needs to look at the endless league tables, now an international enterprise, that seek to measure individual and institutional competitive research success by counting and scoring publications in peer reviewed journals. [8]

This competition, while it turns on quality as determined by peers, is actually a competition that rests on money. Money matters because the cost of research, especially the most prestigious scientific research, is high, and only those institutions that can recruit the best faculty and provide suitable research platforms for them will prevail.

Moreover, the international community has accepted the proposition that competitive research stands as a marker of international preeminence. Absent a competitive research university sector, no nation can hope to see itself among the major world powers, and country after country has engaged in the development of research universities and allocated substantial public funding in support of those enterprises. The international league tables serve as relatively inexact but nonetheless closely followed indicators of success. The goal is to beat the US.

Lest anyone imagine that research is a prestige token only for large universities, a review of the webpages of prestigious American liberal arts colleges will clarify the issue. Not one appears without a feature on the research triumphs of faculty, the grants won, the publications appearing in prestigious journals, the prizes and awards earned by the undergraduate college's research faculty. These small institutions may not have many research superstars, but they require some number to show their faculty competing within the same context of distinction as their larger public and private counterparts. This distinction, they believe, supports the recruitment and retention of high quality students. [9]

Niches of Competition among Colleges and Universities

Although the high quality intensely competitive elite institutions (public and private, college and university) may only represent a minority of institutions and serve only a fraction of 18-24-year-old students, they set the tone and define the parameters of undergraduate institutional distinction. The competition among institutions in America has given us a complicated set of institutional types. At one time, we might have imagined classifying institutions in clearly defined categories. Perhaps emulating the California Master Plan and imposing its rigid structure on the rest of the nation by identifying

research universities, state colleges, and community colleges, each group serving different constituencies even if all conform to some baseline of academic standards defined by accreditation. [10]

In the today's competitive world, however, these categories proved too inflexible. Teachers colleges became state colleges, state colleges became universities, universities sought to become research universities. They framed and re-framed their missions and purposes in terms of their participation in the elite context of highly selective colleges and research universities even if they competed for students from much less exalted populations.

For a while, many states participated in this competition, increasing funding for their public institutions to support nationally competitive research enterprises and selective undergraduate institutions. Second or third tier universities, while unable to compete with the best, could nonetheless redesign themselves to look and function much like the best. They invested in campus improvements, residential facilities, student amenities, competitive sports teams, and faculty research support structures.

This aspiration of everyone competing with the best could not be sustained forever on the tax base of an increasingly resistive public, and states found it more and more difficult to meet all of their obligations. Colleges and universities, always significant political actors, saw the sympathies of their legislative patrons attenuated by the demands of many other more immediately critical constituencies: prisons, roads, social services, health care, and K-12 schools. “Yes,” they said, “the university is critical to our state,” but they also knew that the universities would find ways to sustain themselves even if their budgets declined.

Indeed, the ability of many public universities to avoid visibly catastrophic results from declines in funding, while admirable, carried with it a strategic political weakness. If funding for prisons were cut, the result would be a riot. If police funding were cut, public safety would fail. If health care funding declined, emergency rooms overflowed. But with a loss in university funding, nothing much visible happened. Tuition went up but financial aid went up too and the impact was variable and non-dramatic. No one fired large numbers of faculty and the institution rarely closed major programs or took some other dramatic action. Instead, it froze new hires, it substituted adjuncts for regular faculty, it allowed some marginal programs to die off, it consolidated off-campus programs, and it allowed tuition and fees to rise (not enough to compensate for the lost state revenue but significantly) but institutions rarely did anything that appeared in the news as catastrophic.

Worse yet, in the lead up to a budget cut in the public sector, university people often talked about the end of the world, the decline of the university, the dire things that would happen, but when the budget came, it often was not quite as bad as anticipated. The university felt relieved and thanked the legislature and the governor for not doing worse, and the new budget, lower than the previous year, required adjustments that while they may have weakened the institution failed to make the news.

Universities also discovered that as they made adjustments to their programs on the margin to accommodate lower state revenue and harder to acquire tuition and fee funding, the structure of their expenditures also changed. The non-academic employee count grew faster than the academic employee count. Although it was often fun to blame this on administrators, the real growth came from increases in the number of support personnel for student services of all kinds, research managers, and staff to implement the ever increasing mandated regulations from both state and federal sources. As the institutions became over-regulated on one side and highly responsive to every student issue on the

other, they created programs, experts, and managers to deal with the consequences, each one requiring an office, a staff, and an operational budget. The academic personnel of the institution remained more or less stable, teaching a stable or perhaps slightly increasing student population. New revenue or savings from efficiency projects ended up subsidizing the service and regulatory enterprise of the institution rather than enhancing the academic personnel count.[11]

Content and Context in American Colleges and Universities

Some of this shift to staff over faculty also reflects a growing interest in separating out university content from institutional context. Traditionally, residential colleges and universities married content and context under the presumption that the context of a residential college or university forms a significant part of the instructional value acquired with the content. With the advent of multiple, technology-mediated systems for instruction, it became relatively easy to separate out many elements of the content from the context. Content, moreover, is much less expensive that context.

Although technology offered a means for colleges and universities to expand their student markets without adding expensive facilities and permitted them to reach new audiences, they also suggested that the high cost, high touch personal educational model might not necessarily have as much value as its cost implied. So far, this movement remains somewhat on the margin, but as learning management systems, highly sophisticated self-paced instructional operations, and fully accredited degree programs emerge online, these alternative avenues for a traditional college degree may well undermine many residential campus environments.

Although these newer learning systems reach some significant new audiences, the mainstream market for undergraduates continues to place a high value on exceptional student contexts. Since most instructional programs are more or less equivalent (chemistry is chemistry, micro and macroeconomics are standardized), colleges of all types, public or private, compete to create instructional and living contexts that can attract and hold reasonable numbers of paying students.

A small private liberal arts college needs something on the order of 1,500 to 2,000 students to survive. Recruiting a sufficient number without deeply discounting tuition prompts a competition for quality housing, elaborate student amenities such as recreation centers and elegant dining, and a host of student activities and programs including intercollegiate sports and honors programs, all to enhance the residential experience. Yes, the instruction needs to be good, the faculty responsive, and the placement of graduates reasonably effective, but a key differentiator among institutions of all sizes is the quality of this expensive context. Often the investment in student context requires long-term capital investment in facilities, but whether this improvement produces sustainable increases in paid enrollment remains, in many cases, to be determined.

America's private colleges and universities often have an advantage in this financially challenging time. They have been in the marketplace forever and their business model is tuned to the acquisition of funding from tuition, grants, contracts, foundations, and donors. They have always sought to take advantage of every state and federal program for which they can be eligible, especially those that support student loans and other forms of student subsidies. Their market focus and close attention to the revenue that sustains their enterprises prepared them better for the current world than many of their public sector counterparts. They continually made adjustments to keep their expenses and revenue in balance, and their faculty, staff, students, and alumni all understand the revenue requirements for

success. The number of smaller institutions that have and will go out of business reminds their colleagues of the inexorable requirement of adequate revenue. [12]

In all of this, elite institutions of American higher education remain remarkably stable. These privileged colleges and universities, public and private, have revenue models that can sustain significant change, buffer downturns, and capture benefits from a recovery. They have large endowments, high quality name brands that permit selective student admissions, good faculty and facilities, and significant alumni networks that support graduating students for jobs and contacts. Public members of this elite group are almost all major research universities, many have developed multiple sources of revenue that make them much less dependent on state revenue. The research universities compete intensely against each other, and some move up a bit and others move down, but overall their positions within the hierarchy of federal funding remain relatively stable. Few fall a long way or rise up a great distance over time.[13]

Predicting the Future

What can we expect in the future?

Will we see the massive disruption of higher education that many of our commentators hope for?

> Probably not as the variety and complexity of American higher education makes it highly resilient. At the same time, new delivery systems will emerge that will reach new markets for post-secondary education, but without necessarily destroying the traditional sectors.

Will technological solutions bring higher education to the masses at a low cost and a high success rate?

> Technology will bring higher education to many new audiences, most likely for certificate and other special training purposes. They may well have high success rates for some students in some fields, but they are not likely to remedy structural deficiencies in K-12 student preparation.

Will we see a series of institutional closures as smaller public and private institutions fail to attract adequate student numbers or acquire sufficient state revenue to sustain their enterprise?

> Yes, we will continue to see some small private institutions fail, be bought out, or consolidated. Marginal public institutions may last somewhat longer as they often have local political constituencies that sustain them well past the point of financial viability, but they too may end up consolidated into larger campuses.

Will the elite institutions continue to be sought after by students in large numbers, even with their high tuition?

> The elite, public and private, college and research university, will continue to thrive and prosper as their marketplace is mostly price insensitive within the context of these institutions. A few good but not quite elite private colleges may fall below the mark, and some public universities will fall out of the prestige competition, but for the most part the elite will do fine.

Will innovations in testing and measuring learning achieve a universal acceptance and validity that can sustain accountability linked to funding at a national level for all institutions?

> Much work is taking place on systems for measuring “critical thinking” and other learning attainment. It is likely that the measurement model will work best for those quantitative and

professional disciplines with relatively low humanistic and ideological content. We historians and others of our ilk will likely find it difficult to agree on the definitions and content of testing. The growing sophistication of data acquisition technologies may put the federal government in a position to control higher education policy through the operation of universal, standardized, and data-based evaluation structures. The current effort to create a federal ranking system is the latest version of this initiative, and draws on the experience of previous designs for a possible national student-unit-record system. The goal here is to create national standardized accountability, and therefore national policy control over the current disaggregated higher education system.

The one thing that is sure is that we will find the controversy and criticism that is a constant companion of American university life remains intense and unresolved.

March 2015

For those interested in the history and development of American higher education there is no better starting place than *The Shaping of American Higher Education: Emergence and Growth of the Contemporary System* by Arthur M. Cohen and Carrie B. Kisker (San Francisco, CA : Jossey-Bass, 2010). It is also always helpful when looking at contemporary issues to review the intent of those who helped invent American public higher education. Of particular interest is Thomas Jefferson's *Report of the Commissioners for the University of Virginia, August 4, 1818* (a machine-readable transcription from the Electronic Text Center, University of Virginia Library). Although some may regard the close relationship between the public university and the interests of business, industry, and government as a modern, perhaps neo-liberal, innovation, the Jeffersonian report includes the following text among other discussions of the purpose of the university "...to harmonize and promote the interests of agriculture, manufactures and commerce, and by well-informed views of political economy to give a free scope to the public industry."

[2]For a clear illustration of the changes in the financial structure of American public and private higher education and the growing significant of individual student investment in college work, see Donna M. Desrochers and Rita J. Kirshstein, *College Spending in a Turbulent Decade: Findings From the Delta Cost Project (A Delta Data Update 2000–2010)* (Washington D.C., American Institutes for Research, 2012); Donna M. Desrochers and Steven Hurlburt, *Trends in College Spending: 2001–2011. A Delta Data Update, July 2014*; and Donna M. Desrochers and Rita J. Kirshstein, Labor *Intensive or Labor Expensive? Changing Staffing and Compensation Patterns in Higher Education* (A Delta Cost Project Issue Brief February 2014).

[3]A full exposition of the individual and societal benefits of higher education is in The College Board's 2013 publication, by Sandy Baum, Jennifer Ma, and Kathleen Payea, *The Benefits of Higher Education for Individuals and Society*. For a politically inspired but nonetheless useful summary of these issues see *The Economics of Higher Education. A Report Prepared by the Department of the Treasury with the Department of Education*, Washington, DC: December 2012.

[4]Among the more aggressive proponents of these notions, in addition to the federal government, is the Gates Foundation whose extensive philanthropy is designed to develop and subsidize the transformation of higher education into the production of work ready, employable individuals through nationally standardized, flexible, focused, and test driven systems. See the documents at [http://postsecondary.gatesfoundation.org/] especially the update piece on *Postsecondary Success: Advocacy Priorities*, 2015.

[5]"The original mission of these institutions, as set forth in the first Morrill Act, was to teach agriculture, military tactics, and the mechanic arts as well as classical studies so members of the working classes could obtain a liberal, practical education" as summarized on the APLU website history of land grant institutions [http://www.aplu.org/about-us/history-of-aplu/what-is-a-land-grant-university/] It is also helpful to read the histories of one or another of our distinguished public research universities to recognize the close engagement of these institutions with national agenda, with the political elite of their states, and with the economic drivers of prosperity for their states. See for example, the history of Indiana University in Thomas D. Clark, I*ndiana University, Midwestern Pioneer.* 4 vols. Bloomington: Indiana University Press, 1970-77; and the autobiography of Herman B Wells, *Being lucky: Reminiscences and Reflections*. Bloomington: Indiana University Press, 1980.

[6]Catherine Rampell, "College Graduates Fare Well in Jobs Market, Even through Recession," New York Times, May 3, 2013. See also the full report from the Pew Research Center, *The Rising Cost of NOT Going to College* (February 2014) [http://www.pewsocialtrends.org/files/2014/02/SDT-higher-ed-FINAL-02-11-2014.pdf].

[7]Among the many observers of research competition among US universities, the Measuring University Performance Center (MUP) at Arizona State University and the University of Massachusetts Amherst has published a series of reports on the Top American Research University on an annual basis since 2000. These reports illustrate many of the characteristics of this competition, and each report carries an analytical essay on some feature of that competition as indicated here: The Best American Research University Rankings: Four Perspectives, 2013; Measuring Research Performance: National and International Perspectives, 2012; Moving Up: The Marketplace for Federal Research in America, 2011; In Pursuit of Number One, 2010; Research University Competition and Financial Challenges, 2009; Competition and Restructuring the American Research University, 2008; Rankings, Competition, and the Evolving American University, 2007; Deconstructing University Rankings: Medicine and Engineering, and Single Campus Research Competitiveness, 2005; Measuring and Improving Research Universities: *TheCenter* at Five Years , 2004; The Sports Imperative in America's Research Universities, 2003; University Organization, Governance, and Competitiveness, 2002; Quality Engines: The Competitive Context for Research Universities , 2001; The Myth of Number One: Indicators of Research University

Performance, 2000 [All available online at http://mup.asu.edu/]

[8]*U.S. News & World Report: Best Global Universities Rankings* [http://www.usnews.com/education/best-globaluniversities/rankings]; *QS World University Rankings 2013* [http://www.topuniversities.com/university-rankings/world-university-rankings/2013]; CWTS Leiden Ranking 2014 [http://www.leidenranking.com/ranking/2014]; *Academic Ranking of World Universities* [http://www.shanghairanking.com/ARWU2013.html]; *The Times Higher Education University Rankings* [http://www.timeshighereducation.co.uk/world-universityrankings/2013-14/world-ranking]. Needless to say, the methodology controversy surrounding these rankings is lively and often statistically complex. See the items in the notes to Diane D. Craig and John V. Lombardi, "The Best American Research Universities Rankings: Four Perspectives" in *The Top American Research Universities* (2013) [http://mup.asu.edu/Top-American-Research-Universities-2013-Annual-Report-MUP-2015-02-13.pdf]

[9]Williams College's website is here [http://www.williams.edu/academics/research/] and with Pomona's [http://www.pomona.edu/research/] the offer a clear view of the research commitment of small, elite private colleges.

[10]Although much referenced, the actual document that established the California Master Plan in 1960 is not always easily available. See the original document at *A Master Plan for Higher Education in California: 1960-1975* [http://www.ucop.edu/acadinit/mastplan/MasterPlan1960.pdf]

[11]See the Delta Project items cited in note 2 above.

[12]Much of the reporting on the economic failure of small colleges focuses on individual cases, an interesting survey of this process appears in the paper *Learning from Closed Institutions: Indicators of Risk for Small Private Colleges and Universities* by Dawn Lyken-Segosebe and Justin Cole Shepherd (Vanderbilt University: Higher Education Leadership and Policy Studies, Peabody College of Education and Human Development, 2013) [http://www.ticua.org/research/sm_files/Learning%20from%20Closed%20Institutions%20updated.docx]

[13]See the items from the *Measuring Research Universities* project in note 6 above.