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Bring the World to California

A global hub for higher education

The world is thirsty for higher education. International talent continues to seek access to colleges and universities in the United States, and particularly in California, which boasts a pioneering higher education system with global brand-name appeal that is unmatched by any other state—indeed any other nation. Yet California, and the United States in general, are underperforming when compared to our economic rivals in terms of the percentage of international students we have enrolled in our higher education institutions.

At the same time, California's public higher education system has suffered dramatic long-term cuts in public funding, creating unprecedented financial challenges and threatening its ability to grow in enrollment and academic programs required to keep pace with the state's growing population.¹

California, and the world in general, are also confronted by a long-term projected shortage of people with advanced educations, including engineers, managers, and

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decision-makers trained in science, technology, engineering, and math needed to sustain knowledge-driven economies. California, like other major economies, always should be looking for ways to boost regional economic activity. International students already represent a significant positive cash flow to the communities in which they live and learn.

These circumstances pose a tremendous opportunity. In the following, we propose and discuss the idea of developing a coherent strategy related to attracting and enrolling significantly more international students by establishing one or more regional-based “California Higher Education Hubs.” California’s EdHub would voluntarily link a regional set of universities and colleges to help recruit, enroll, and provide support services, such as housing, for talented international students. At first, an EdHub might include a set of five to ten institutions in a region, offering degree programs in fields that have international demand, or possibly in a sequential mode between, say, a community college and a private, bachelor’s degree-granting college or a local California State University campus. It would require a minimal investment by universities and colleges, along with some form of “joint venture” capital from local governments and business sectors that would gain the most from the talent and business activity generated.

One goal is to expand California’s capacity to enroll talent from throughout the world, in part to support California’s economy; but another equally important goal is to help formulate a funding model that, as demonstrated in other parts of the world, generates new revenue to help subsidize and expand access to higher education for native Californians. Even with an improved economy and projections of a state budget surplus for the first time since the Great Recession, there are few indicators that California’s government will make any significant new investment in public higher education. We need revenue growth for California’s still cash-starved public higher education system.

The California EdHub idea is about the money, but it is also about solidifying California and metropolitan regions such as the Bay Area, Los Angeles, and San Diego as global talent magnets, further elevating the state as a global actor with both economic and, as we will discuss here, humanitarian benefits—and it is achievable.

The most competitive economies in the world will be those that both nurture and develop native and international

talent from throughout the globe. These are not mutually exclusive goals. Higher education and its two primary outputs—talent and new knowledge—are recognized worldwide as major contributors to regional economic growth, and they are the primary indicators of future national prosperity, so it’s no surprise that our hub concept is a California twist on an idea already being tested elsewhere around the world.

Clearly recognizing that the global market of international students is growing rapidly, China, Singapore, Qatar, the United Arab Emirates, South Korea, Malaysia, and a number of cities in the European Union have all launched highly publicized efforts to create “world-class universities” and higher education hubs in cities or regions over the past decade. Largely inspired by the experience of the San Francisco Bay Area in demonstrating the power of using prestigious research universities, such as Stanford and Berkeley, as key resources and partners in creating new knowledge-intensive industries and enterprises, these nations have launched their own new higher-education “hotspots.” These efforts usually leverage large investments of public and private funds to attract leading research universities from the United States and Europe to locate satellite campuses or facilities in foreign countries.

These global hubs for higher education represent a new competitive force in the global market for talented people. Higher education administrators and scholars are curious and concerned about the sustainability of these new and rapidly expanding initiatives. Many are currently functioning with large government or private sector subsidies. Will that continue? Will international student demand ebb?

One recent report estimates that world demand for international higher education will increase from 1.8 million in 2002 to 7.2 million or more in 2025 as countries such as China, India, Indonesia, Brazil, Mexico, Chile, South Korea, Vietnam, and Saudi Arabia grow economically and struggle to meet domestic demand for high-quality, advanced education.² International students are already a major stimulus to the US economy. American colleges and universities enroll

Leveraging California’s
current market advantage
in global higher education.

over 800,000 international students. These students paid tuition and fees estimated at a total of \$13 billion during the 2009–2010 academic year. Add in housing and other living costs and the direct total economic impact of international students is nearly \$19 billion a year. The real economic impact is likely much larger than this, if indirect impacts such as job creation and additional potential for international business ventures are included. While those numbers may sound large, only about 3 percent of undergraduates in accredited colleges and universities in the United States are international students. This compares to over 10 percent in a similar grouping of European nations.³ Even in graduate education, top providers in Europe have a higher number and higher percentage of foreign students—over 28 percent versus 24 percent in the United States. International student numbers continue to grow in American universities and colleges, but those numbers are growing faster in other parts of the world.

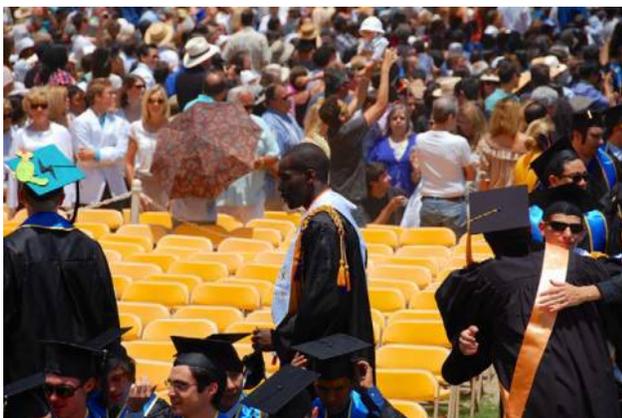
Americans are used to the idea that we draw talent to our universities and colleges from throughout the world, in turn helping to create the highly skilled labor pool essential for high-tech and other industries. The United States has done this for decades, in large part because of the reputation of our existing higher education institutions and also because the nation is known as a land of immigrants, open to those who can come and contribute to its economy and society. But that comparative advantage is eroding, as world demand for higher education continues to climb, driven by the insatiable desire for socioeconomic mobility of individuals and by governments that widely recognize that broad access to higher education and the production of degrees at the

baccalaureate, professional, and doctoral level are primary factors for economic development.

Lawmakers and business leaders in the United States need to better understand the global market position of our higher education institutions. Of all America's exports, higher education is one of the service sectors with the most potential for growth. It is, however, also an industry in need of a larger global view. When administrators look at the bigger picture, they will see that global competition is gaining rapidly. As universities elsewhere in the world are improving their quality and marketing, and as governments expand programs intended to draw the world's pool of talented and increasingly mobile young people, California—and the United States—has been underperforming at the undergraduate level, and our strength in enrolling foreign students in graduate programs has become less competitive.

Currently, California, New York, Texas, Massachusetts, Illinois, and Florida are the six main destinations for international students in the United States. These states compose nearly 50 percent of the US international student market, and California has the largest share.

Of all the major urban areas in the United States, Boston has the closest thing to a higher education hub. But that is largely a fluke of history—the city has an unusual colocation of high-profile private institutions, all of which have proportionately very large graduate school populations—and not the result of any overt effort by government or the institutions in the area. However, there is limited growth potential in the Boston area, in part because the primary providers of higher education are private institutions that have limited interest in enrollment growth. As such, the path is clear for



California to become a leading proponent of the EdHub model.

Although there are global models California could emulate, there are big differences in the motivations and needs of the cities and regions that are pursuing this path, and none of them have the tremendous brand-name advantage and quality of higher education institutions that California has. Foreign competitors largely seek to attract foreign universities to help build enrollment and program capacity at home, and they are funded almost solely by government subsidies. Our proposed California model of the EdHub would also build enrollment capacity, but it is focused on attracting the world's talent and generating additional income for existing public and private colleges and universities here in California.

Seeking to raise revenue to hire more faculty, offer competitive faculty salaries, and stem a steady increase in student to faculty ratios, UC Berkeley has already expanded its enrollment of higher-paying international and out-of-state students fivefold. Southern California universities have kept pace, and this trend is not limited to elite universities. Two community colleges, Foothill De Anza and Santa Monica, each have nearly as many international students as Berkeley.

With 20 percent of Berkeley's undergraduate classes now filled by non-Californians, there are legitimate concerns that international student enrollment is coming at the expense of in-state students. Those concerns will need to be allayed whether our EdHub proposal is adopted or not.

The zero-sum circumstances at Berkeley obscure the larger reality. Currently, the higher fees that international students pay at California's public colleges and universities subsidize domestic student enrollment, but it is not a well-

articulated policy at the institutional or statewide level.⁴ Any regional or statewide effort to increase international student enrollment must be overtly tied to an effort to increase opportunities for in-state students. EdHubs could provide a framework for doing just that.

STEM—science, technology, engineering, and math—is the big play in the current global market, although it is not the only thing on which California's EdHubs should focus. There is a growing demand, in California, the United States, and around the world, for students who simply have bachelor's degrees, including those in social science and humanities fields.

The United Nations Organization for Education, Science, and Culture (UNESCO) recently surveyed education in fifty different fields of engineering worldwide.⁵ The survey noted the invaluable contribution of engineering and technological advances and an increase in engineering workforces as crucial to sustainable human, social, and economic development. But it found many of these improvements have been unevenly distributed for a great many reasons, one being the lack of engineering programs and graduates in developing economies such as sub-Saharan Africa and India.⁶

UNESCO also found that while the number of engineering students is increasing worldwide, the percentage of students enrolling in engineering classes is dropping compared to enrollment in other disciplines. In Japan, the Netherlands, Norway, and the Republic of Korea, for example, enrollment decreases of 5 percent to 10 percent have been recorded since the late 1990s. By 2020 Denmark will need 14,000 engineers, and Germany is already experiencing a serious shortage of engineers.



Because there is a global need for well-educated STEM-trained graduates, national and California-based policies and strategies related to international students should embrace the fact that American universities and colleges are an important source for meeting world demand and needs.

But what about the supply and demand needs of the United States and California? A number of reports have projected large-scale deficits in science, engineering, math, and technology bachelors and graduate degrees in the United States, too. Our view is that we need to increase California students entering STEM fields, while also aggressively looking to increase the US market share of international students in these fields, along with improvements in visa policies and financial aid to encourage some of this international talent pool to stay and participate in local economies.

Again, expanding the number of international students can be part of a solution that meets both domestic and global needs. But in order to reap the benefits of this global opportunity, California institutions of higher education will have to make a transition from what is a largely *laissez faire*, uncoordinated approach to enrolling international students at the undergraduate and graduate level.

As a first step, California colleges and universities can make it easier for international students to apply and enroll. Under the present system, prospective students in foreign countries face a daunting task of figuring out opportunities and pathways to enrollment in a US institution. Many pay middlemen to provide information on where and how to apply. Some institutions also pay agents to seek out potential students. There are significant biases built into the current

“every institution on their own” approach—one being that students are not always well served and they tend to come from upper-income and professional families who can pay agents and tuition fees, with bright lower-income students virtually excluded.

A coordinated effort on the part of California universities would save students the cost of middlemen and level the playing field for international students. At the most rudimentary level, a network of California’s higher education institutions could develop a marketing campaign aimed at foreign students to promote enrollment and program opportunities in California’s colleges and universities and untangle the process of applying and being admitted.

But a coordinated recruitment campaign is the low-hanging fruit. It’s amazing that this has not already happened. But to get the maximum benefit from EdHubs, we should consider what each region has to offer educationally and not just focus on the individual schools that dot the state.

So what would a higher education hub look like in, say, the Bay Area? At a mature stage, it could include some ten community colleges and universities—public and private—with varying levels of engagement in the hub concept. They would coordinate international recruitment to help potential students find the right undergraduate and graduate academic programs, some of which could include joint degrees between, for instance, a two-year community college and one of the local California State University campuses. It could include a joint program between a public university and a private college or university. Or, it could simply be a stand-alone program offered by one of the members of the hub.



Campuses that are members of the hub would not have to offer a joint-degree program. They could simply integrate the recruitment effort and other benefits of the hub concept into their operations. The ability of a campus to pick or choose its level of participation is important, as each institution would only participate in programs that benefit it. The key to successful EdHub programs would be academic and career-oriented degree programs that are attractive in the global market, in fields where local institutions either have enrollment capacity or an ability to expand to take on additional students.

Other benefits of the hub approach could include economies of scale in student support services for international students and a more coherent approach to student housing. Most campuses do a poor job of providing counseling services and opportunities for international students to socially integrate into their home campuses and life in California. Even though international students are required to have good to excellent English language skills, most of these students need access to formal programs to improve those skills. Campuses could team up to provide better services and language remediation courses. Easy access to housing is also vitally important to any coherent approach to recruiting and enrolling international students, at the undergraduate and graduate level. In part to facilitate a better process of integration into the life of our campuses and California society, we would like to see the development of one or more “international houses” that could be centrally located near public transportation.

International students need appropriate housing, and most will be best served if they are integrated into dorms and apartments that include both international and

domestic students. This is the model of UC Berkeley’s famous International House, established in 1930 with funding from John D. Rockefeller.

Just as the original International House was philanthropically funded, there could be private funding support for international hub housing facilities that would be largely for international students, but also include local students who would benefit from learning in a more global environment. Both local government and the private sector could work together in planning and funding such facilities. In the Bay Area, with its tremendous concentration of high-tech businesses, we would like to see a centrally located “EdHub International House” in San Francisco or in one of the redevelopment areas of an increasingly improving downtown Oakland. Local government and businesses should see investment in housing as a key component in supporting the hub concept, and an opportunity for boosting local economic activity.

Development of a funding model that includes local government and private sector subsidization—at least in the initial decade or so—is a key part of the hub concept. But the greatest sources of income to help cover the costs to participating institutions, and why it would be attractive to campuses, would be added revenue from tuition. Already, most public institutions, from the local community colleges, to campuses such as Berkeley and UCLA, are planning to increase their enrollment of international students. In addition to the increased revenue these students bring, the hub idea would add value by coordinating recruitment and finding economies and program benefits in joint programs. It could also be a much-improved learning experience for international students.



As the competition for international talent escalates, the hub idea, whether in the Bay Area, the Los Angeles metropolitan region, or in San Diego, would significantly boost the number of top students throughout the world applying to participating campuses. That means that these institutions will have a larger pool of students to choose from, and schools could begin to diversify their international student population, which, currently, is largely from China and India. This might require the development of a grant and scholarship program for targeted lower-income international students at the undergraduate level that would, of course, complicate the funding model. Perhaps financial aid could be subsidized by local foundations and by members of the communities and business that might gain the most from this model.

Currently, American institutions are behind the curve compared to other institutions around the world in offering financial aid to specific international undergraduate populations. This ought to change. The opportunity here is not just to bring in more revenue but to do good in the world. Those graduates can go on to tackle global challenges such as reducing poverty, promoting sustainable social and economic development, bridging the digital and broader technological and knowledge divides, and developing technologies that will help mitigate and prevent future climate change.

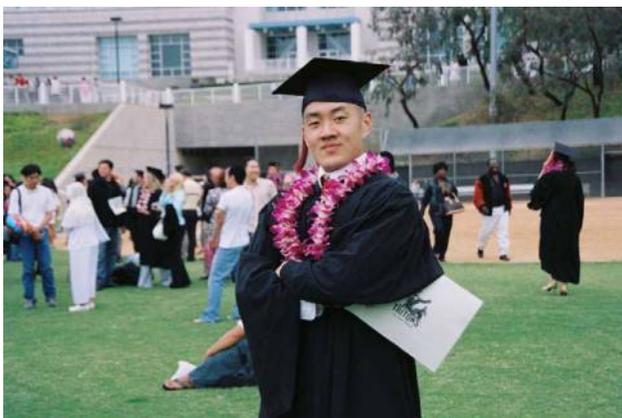
No doubt, there would be significant challenges in pursuing the EdHub idea. We are in an era in which institutions of higher education are increasingly isolated and on their own—one big consequence from decades of public disinvestment in public higher education in California and throughout the United States. California EdHubs would

require a new kind of institutional cooperation that, although potentially cost-effective, might be too radical for some.

Some institutions will be more interested than others. Berkeley, Stanford, UCLA, and USC may not see enough immediate gain in, say, expanding and diversifying their international pool of applicants or see great benefit in joint programs—but their participation would give an EdHub in their region gravitas. They would convey a message throughout the world of California’s serious intent in this venture. While perhaps not the biggest beneficiaries, we would hope their academic leaders would see an EdHub as part of their contributions to regional economic development, and as part of their responsibility as leaders in higher education in California, the United States, and the World.

There are also forces outside of California that would influence the success of EdHubs. Federal homeland security policies regulating student visas and immigration policies that limit employment opportunities and paths to citizenship for foreign nationals who gain a doctorate could limit the success of EdHubs. We are hopeful that a national consensus on immigration reform seems to be forming around a policy framework found in other developed economies—attempting to attract and retain international talent.

We see the success of EdHubs as hinging on a mix of retaining some of the international talent we train here in California and sending other successful graduates out into the world. We want to meet California’s domestic needs for talent and to send talented students abroad, with the residual benefits that accrue to California’s economy through the networks they create.



The path to creating the first EdHubs on the ground could start with a commitment by a set of higher education institutions to seriously explore the idea, along with local governments and perhaps a regional economic development group with private sector members. If they agreed in principle on the potential benefits, we would then suggest a series of careful steps, including a feasibility assessment, an agreement on a funding and revenue model, and an initial commitment by a set of institutions to launch an EdHub with a defined set of programs that will appeal to international students and meet a known global demand for education and training.

This should be seen as a purposeful, deliberate attempt to grow a major US export. Universities and colleges, the private sector, and lawmakers should understand the potential financial advantages and begin to assess how a more coherent strategy, such as what we propose, could leverage California's current market advantage in global higher education.

In time, the education economies in the Bay Area, Los Angeles, and San Diego could become even more significant regional economic drivers than they are today. But just as importantly, our EdHub proposal is also about enhancing the quality and reputation of our universities and colleges here at home as well as abroad. It is about building enrollment capacity for California, as well as international students. It is about integrating international perspectives into the activities and experiences of students and faculty in our colleges and universities, and broadening opportunities for international collaborations in education, research, business, government, and civil society. And it is about continuing to attract talent from throughout the world who can contribute to our economy and cultural capital here in California as well as the world. **B**

Notes

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- ¹ See John Aubrey Douglass, "Can We Save the College Dream?: The Death and Life of California's Public Universities," *Boom: A Journal of California* Vol. 1, Number 2, pps 25-42, <http://www.boomcalifornia.com/>; also John Aubrey Douglass, "To Grow or Not to Grow? A Post-Great Recession Synopsis of the Political, Financial, and Social Contract Challenges Facing the University of California," Research and Occasional Papers Series (ROPS), Center for Studies in Higher Education, CSHE.15.13 (December 2013): <http://cshe.berkeley.edu/publications/grow-or-not-grow-post-great-recession-synopsis-political-financial-and-social-contract>.
- ² A. Bohm, et al., *The Global Student Mobility 2025 Report: Forecasts of the Global Demand for International Education* (Canberra, Australia, 2002).
- ³ John A. Douglass and Richard Edelstein, "The Global Competition for Talent: The Rapidly Changing Market for International Students and the Need for a Strategic Approach in the US," CSHE Research and Occasional Paper Series (ROPS), CSHE.8.2009, October 2009: <http://cshe.berkeley.edu/publications/publications.php?id=341>; A shorter version of this paper was published in *Change* magazine, July/August 2009. On recent data regarding international graduate students in the United States, see Sarah King Head, "US: Chinese Help Spur Modest Graduate Increase," *University World News*, 10 November 2010: <http://www.universityworldnews.com/article.php?story=20101110133853841>.
- ⁴ See Douglass and Edelstein, "The Global Competition for Talent."
- ⁵ UNESCO, *Engineering: Issues, Challenges and Opportunities for Development* (Nov 2010): see <http://climate-l.org/news/unesco-releases-report-on-engineering-and-development/>.
- ⁶ "Engineering Shortage Threatens Development," *University World News*, 7 November 2010: <http://www.universityworldnews.com/article.php?story=20101105221936787>.