

Social Transformation and the University of California
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Good morning. I would like to step outside the University of California for a moment to describe the societal context in which the University operates. I believe a profound social transformation is taking place in California and I consider the University of California to be one of the institutions best positioned to help California successfully accomplish this transformation. I will conclude by telling you what we are doing to improve the University's ability to lead this transformation, as well as what you can do to help.

Demographic Change in California

Let me begin by describing some of the demographic changes that are taking place in California. First, California is undergoing one of the increases in population of any state in

the United States, a growth of nearly 60 percent between now and 2025. That is a growth rate that few societies have experienced, and it will challenge California to its very essence.

Second, one-third of all immigrants arriving in the United States from around the world will settle in California, according to Census Bureau projections. This means California will have a population that is about 27 percent immigrants, compared to 12 percent for the nation as a whole. And it will be a real challenge to fully assimilate these new citizens into our society. Parenthetically, California's growth in immigrants is expected to be greater than the next four states combined.

Third, California will have one of the youngest populations in the country. This is due to two reasons. First, because of the international immigration I just mentioned. Most immigrants arrive in California at an early age and have a higher birthrate than the general California population. Second, because California's native population is experiencing a surge in births.

Many in the Baby Boom, and the subsequent generation, delayed marriage and having children to pursue careers. For these reasons, California will have about one-third of its population under the age of twenty and only 15 percent over the age of sixty-five. (Florida, for example, is nearly the reverse.) These young Californians will need to be educated. If we do so effectively, they could become the power that will drive California's economy and support the retirees who rely on social services provided by the state.

Lastly, California will have the most diverse population in terms of ethnic and racial composition. The estimate is that between 1980 and 2040, the white, non-Hispanic population will decline from 67 percent to 26 percent. The Latino population will increase from 19 percent to 50 percent. The Asian American population will increase from 5 percent to 13 percent. The African American population is expected to decrease from 8 percent to 7 percent. And the Native American population is expected to remain under 1 percent.

With changes of this magnitude, the questions that come immediately to mind are: How can society best accommodate these new population groups? And how can we give them the opportunity to participate fully in society? I believe the University of California has a key role in answering both questions.

Inequality in Income and Educational Opportunity

Another issue that converges with the issue of population change is the growing income inequality in the United States. Thomas Piketty of the Paris School of Economics and Emmanuel Saez, a Berkeley economics professor, have just completed a noteworthy study. They conclude that the top 1 percent of income earners in the United States, those earning at least \$300,000 a year, have more than doubled their share of the national wealth in the past 20 years. Therefore, the remaining 99 percent have experienced a declining share of the national wealth.

In the new issue of *The Atlantic Monthly*, senior editor Clive Crook has written a compelling commentary about income inequality in the United States. It is entitled *Rags to Rags, Riches to Riches*. He writes, "In America, more than in other advanced economies, poor children stay poor ... and rich children stay rich..."

These descriptions of the United States today are very different from what most of us grew up believing as one of our societal values. Crook cites statistics that show that in the United States, the so-called "stickiness" of remaining in either the wealthy group or the poor group is much higher than in Denmark, Germany, Great Britain, and other industrialized societies. I ask you, "What can we do about this?" This is not what America has stood for in past generations.

Global Economic Change

At the same time, the United States faces tremendous global economic challenges. China, India and the European community are all investing in higher education as well as in research and development at an impressive pace. They need to do so because they have vast populations they want to bring into the mainstream of society. But their investments are coming at the very same time that the United States has been slowing its investments in higher education and in research and development. China and India, which we visited in the past two years, each graduate about 5 million students from college annually. And their leaders acknowledge that their economies cannot provide sufficient jobs for them. The result is that some of the best educated Chinese and Indians migrate to jobs throughout the world, many in the United States. Both countries are aggressively trying to build their economies to employ their citizens and retain them at home.

When you reflect on this large supply of well-educated people, the lower labor costs in these societies, the growing consumer

markets for American companies in those countries, and generous government subsidies to support economic growth, you can begin to understand why China and India are successful at enticing U.S. companies to set up manufacturing operations abroad. Once the companies establish manufacturing centers abroad, soon thereafter they establish service centers, such as call centers, and later, research and development centers, which had once been the exclusive province of the United States.

Most economists will say that the best way to increase innovation and productivity – which will, in turn, improve the quality of life and the standard of living – is through education and research and development. With the demise of AT&T's Bell Laboratories, General Electric labs, Xerox labs, IBM labs, and other industrial research labs over the past 30 years, it is clear that the federal government and American business leaders are placing great expectations on America's research universities. As Bob [Dynes] said earlier, there is no university in

the United States that has the scale or the quality of the University of California. This means that the University is positioned to be one of the primary agents of social transformation.

UC and the Social Compact

Let me describe a few ways that the University of California is effecting this change. First, the University performs more research than any other institution of higher education in the United States or on the face of the earth. UC conducts more research than the Ivy League or the Big 10 midwestern universities. UC is ranked number one in federal R&D expenditures. UC faculty, alumni and students have created many of the great companies that are leading the world, companies like Intel, Genentech, Amgen, Qualcomm and Broadcom. And yet, these companies derive most of their revenue not from within the United States but from outside the United States. So what keeps them in California, where they started? If you ask their CEOs, they will often respond, "the

University of California.” What holds their companies in California is the number of students we graduate, the quality of the education the students receive, the basic research performed by the University that the companies are able to transform into products and services that benefit society, and the faculty with whom the companies can consult.

This decade, our undergraduate enrollments will increase by about 50,000 students. California has other great universities, such as Stanford, Caltech and USC. But as we grow by 50,000 students, those universities are expected to grow by a combined total of approximately 1,500 students. Why?

Because they have different goals and different economic models. So the most significant impact on society is not likely to come from California’s private universities and colleges but, rather from its public institutions.

Let me describe what our freshman class looks like as a measure of our success in helping bring about the social

transformation I described at the beginning of my remarks.

Based on last week's "statement of intent to register" data for fall 2007, 41 percent of UC freshman admits come from families in which neither parent has a 4-year college degree. Another 37 percent come from families earning \$40,000 per year or less. The comparable figure at Harvard is approximately 8 percent. It's about 10 percent at Yale and 13 percent at Stanford.

Twenty percent of our freshmen come from high schools ranked in the lowest 40 percent on the "Academic Performance Index" of California high schools. These incoming freshmen have overcome incredible obstacles to attain the University's admissions standards. Lastly, 23 percent of these incoming freshmen were born outside the United States, and an additional 37 percent were born in the United States but have at least one parent born outside the United States. So 60 percent were either born outside the United States or have a parent born outside the United States.

With this information in mind, you can see that the University has the quality, the size, and the scale to transform society, and it is doing so. At the same time, UC is not perfect. We know that the University's student population does not reflect the racial and ethnic composition of California's high schools. But if you look at the characteristics of our students over a long span of time, say, 30 years, there have been dramatic changes. Thirty years ago white students made up 80 percent of our enrollment. Today they represent only 41 percent, and the percentage is even lower in the freshman class. The Latino student population was about 4 percent 30 years ago. Now Latinos represent close to 17 percent of our entering freshman class. Unfortunately, the African American student population has actually declined over this period of time. The Asian American population has increased from 5 percent to 38 percent, which is a dramatic change. The Native American student population, unfortunately, has remained under 1 percent. While we still need to make further progress, there have been significant changes.

If UC is going to continue on its path of helping California economically and socially, we are going to have to attract much greater levels of public and private support than ever before. So what are we doing about that?

Shifts in State and Federal Support

The State of California provides only 20 percent of UC funding. But it is a crucial 20 percent, because it pays the cost of student instruction and faculty salaries, which are the foundation on which the University's finances are built. Yet, the share of the state budget spent on the University has dropped from 7 percent in 1970 to about 3.5 percent today.

Some people would say that the reduction in state funding is inevitable. I believe it is a statement of state public policy priorities. I believe that conscious public policy decisions have been made to shift the costs of education from society as a whole, from all of us as taxpayers, to students and their families.

From 1984 to 2004, state spending per capita on prisons increased by 165 percent. Spending on health and human services increased by 31 percent. And spending on K-12 education increased by 37 percent. During the same period, state spending on higher education decreased by 9 percent. It is difficult to require prisoners pay for their incarceration. It is equally difficult to require the poor to pay for the health care and social services provided by the state. And it would be similarly difficult for the state to require that families pay tuition for public K-12 education. So the costs of a higher education have increasingly shifted to students and their parents.

Fortunately, the outlook is brightening. The Governor has not only fulfilled his budget compact agreement with the University and California State University, but this year, UC will receive \$300 million in state funds over and above the amount the Governor's compact funding formula provides to the University. And you may remember that the Governor said the compact is

a funding floor, not a ceiling. Through recent history, every governor has provided UC with more funding than was specified in their budget compacts and Governor Schwarzenegger has done so as well. But we will have to do more if we are going to pay for competitive salaries for faculty and staff, improve the student/faculty ratio, and enhance our graduate education and research programs.

One of the big challenges we face in Sacramento is term limits. Just as Legislators begin to master their responsibilities, they must leave office or run for election in the other house of the Legislature or at another level of government. This means that we must educate a whole new group of legislators every two or three years. California's social compact that built the infrastructure for which Governor Pat Brown was renowned – waterways, roads and higher education – seems to have unraveled. Californians don't understand the California Master Plan for Higher Education and, as a result, nor do their legislators. So California elected officials are not as committed

to funding higher education as were their predecessors. That is one of the biggest challenges we face.

In Washington, there is a partisan divide on most issues starting with the war in Iraq. For the 2007 budget year, the Congressional Budget Office is projecting a federal deficit of \$177 billion, in large measure because funds have been appropriated for the wars in Iraq and Afghanistan but taxes have not been raised. This will limit funding available for student financial aid, for research and for our medical centers. At the same time, there are a number of positive developments. Bob mentioned his Science and Math Initiative. Members of Congress have embraced this program and bills have been introduced in both houses of Congress to increase support for math and science education. The goal is to increase the number and quality of K-12 math and science teachers. Additionally, there is support for the "innovation agenda" which will increase research funding in the physical sciences to complement recent increases for research in the

health sciences, for which funding was doubled over a four-year period. The innovation agenda aims to double funding for the National Science Foundation and the Department of Energy. Our hope is that there will be a big step in that direction, since funding for the physical sciences has been flat for the past decade. However, the President and members of Congress have recently said that they are going to exert fiscal discipline. So as we move toward September 30, which is the conclusion of the federal fiscal year, we are going to see a tremendous tug of war between the desire to increase funding for research, and student financial aid to improve access and affordability in higher education on one hand, and the desire to instill fiscal discipline and reduce the federal deficit.

Building Relationships/Advocacy Efforts

You must be asking yourselves, "So, what are we doing about these challenges?" First, we have conducted extensive public polling to understand Californians' attitudes toward UC. We have learned that Californians deeply respect the University of

California. Most aspire to have their children attend the University, more so than to attend Stanford, USC, or Caltech. But, at the same time, they feel little personal connection to the University, in spite of the many things the University does to improve people's daily lives. They don't really understand how the University benefits them unless they have a child or a grandchild at the University. Remember that only 12.5 percent of the state's high school students are eligible for the University; 12.5 percent is not a sufficient base of support to carry the University to success in Sacramento or Washington. In order for the University to continue to make a difference in the lives of Californians, we need to create a much broader and more robust base of support than 12.5 percent of the population.

To address this need, we have developed an integrated communications effort among the campuses, the national laboratories, and the Office of the President to explain to the people of California how the University benefits their everyday lives, not just in the classroom but in every way possible. We

have focused on UC's impact on the economy, job growth and company creation; on advances in health care; on our national security; on the environment; on the safety of the food we eat; and on our cultural life and entertainment. For example, many of you may already know that in the 1800s, the great Central Valley was not an agricultural region. It barely supported cattle-grazing and sheep-grazing. But through the efforts of a single University professor who changed the soil chemistry of the Central Valley, it has become one of the world's most productive farming regions. In the 1960s, the automobile safety standards that we take for granted – such as seatbelts, shatter-proof windshields, and head rests – became national standards because of efforts by our faculty to improve transportation safety. The identification of HIV as the cause of AIDS was made at the University of California, as were efforts to protect the nation's blood supply so the disease would not be passed-on through blood donations. Recombinant DNA technology was the result of research conducted by UC and Stanford professors, which gave birth to the biotechnology

industry and hundreds of thousands of jobs in the state. And lastly, UC faculty pioneered the technological basis for the modern telecommunications and entertainment industry through lasers, fiber optics, and wireless technologies that make possible everything from compact discs to cellular phones.

We want people throughout the state to know and appreciate that their everyday lives are shaped by the University of California. So we have launched an advocacy effort to help legislators understand the dynamics of the University and its impact on society. An electronic advocacy campaign enables people to go online and stay informed about public policy issues and participate as advocates. We recently faced a bill that would have increased our administrative costs by \$5 million per year. Our advocates sent 121,000 electronic messages to the Legislature, and the bill died overnight. Business leaders have embraced advocacy for UC in a very active way in both Sacramento and Washington. Business CEOs have met with Legislators in their districts and in

Sacramento to extol the value of the University of California, not just to their companies, but to society as a whole. And Bob has been traveling the state carrying these messages to the people of California and engaging them in their communities, with a very positive response.

Our alumni have become energized. We have 1.4 million living alumni. Eighty percent of them live in California. We are mobilizing them. Our Alumni Associations have developed a new strategic plan in which they have committed to play a greater role in Legislative advocacy, in philanthropy to the University, and in communicating the value of the University to the public.

Lastly, we are increasing private giving to the University. The President's Office has provided the campuses with \$80 million over the last 10 years to strengthen campus fund-raising.

When we began the program, UC was raising about \$500

million. We are now raising \$1.3 billion. And our goal is to increase that amount to \$2 billion.

Conclusion: What Is Your Role In Building Support?

In conclusion, each of you has a very special role in determining the University's future. As leaders of the University, I would like you to think of your jobs in a broad context.

Californians have very high expectations of the University. As we have seen in the last year, when we stumble, the public will hold us accountable, and they should. So, when you make decisions, think about how your decision would fare if it were publicized on the front page of the Los Angeles Times or how it would fare if you were asked to defend your decision at a public hearing in Sacramento.

Secondly, I hope you will think of yourself as an advocate for the University. In all of our public polling, the most credible sources of information about the University are the faculty, staff, and students. When you speak to your neighbors, when you

speak to community service groups, when you interact with colleagues outside the University, you're doing exactly what Californians want, which is conveying through word of mouth your personal knowledge of the role of the University of California. That has a far bigger impact on the public than press releases, publications, radio, television, or any other source.

I would like to end with the thought that each of you has a role in shaping the future of the University of California; and because of the University of California's role in society, you have the ability to shape the future of California as well. This is an important responsibility with far-reach consequences. Take on the responsibility with the knowledge that in doing so you will improve the lives of millions of Californians today and in future generations.