

# Higher Education in Texas

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*Remarks to the Rotary Club of Dallas*



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Dallas, Texas  
June 13, 2007

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*The views expressed are my own and do not necessarily reflect official positions of the Federal Reserve System.*

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I love speaking to Rotarians, especially the Downtown Rotary. I was a member of this wonderful club before I went off to serve in Washington in 1997. I loved every minute of it, especially the patriotism and the esprit de corps. I have always considered Rotarians the Marine Corps of the civic community. Remember what Ronald Reagan said about the Marines? “Some people spend an entire lifetime wondering if they have made a difference. The Marines don’t have that problem.”

Neither do Rotarians. You have taken Paul Harris’ vision and expanded upon and realized it, making every community in America better for it.

I also love the Rotarian sense of humor. When I was a member, Carol Reed used to read the “news” to us at the beginning of every meeting here at Downtown Rotary. One of my all-time favorites was about a man who had fallen into a river in Egypt and had managed to fight off an attack by a crocodile. The punch line, of course, was that if you didn’t believe a man could fend off a croc with his bare hands, then you yourself were in “de-Nile.”

Today, I want to talk about another kind of denial. I am not going to talk about the economy or monetary policy or interest rates. We can do that in the question-and-answer period after this sermon, if you wish. What I want to talk about is higher education. I want to focus on the tendency of Dallas to deny that we are getting the short end of the stick when it comes to producing the academic and intellectual excellence needed to make Dallas the great city we all want it to be.

I have deliberately picked the Downtown Rotary Club to convey this message. Rotarians have a long history of commitment to educational excellence, which has benefited countless communities in the U.S. and around the world. And, incidentally, it directly benefited the Federal Reserve. Paul Volcker, the Zeus of central banking gods, the man who pulled this country back from the brink of economic catastrophe, studied at the London School of Economics as a Rotary Scholar. I always speak for myself and for no other official of the Federal Reserve System. Today is no exception. But I think I am safe in saying the entire Federal Reserve holds Rotary in the highest regard. We thank you for what you care about and what you do.

I know that you care about education. I know that you do so much for Dallas. So let me get to the point.

Dallas–Fort Worth is the eighth-most-populous metropolitan area in the country and the fifth-most economically productive. Texas ranks second in the nation in population and productivity, surpassed on both fronts only by California.

Texas has six public university systems. The University of Texas System is the granddaddy of them all, with 190,000 students in nine universities and six health institutions. The Texas A&M System has nine universities with 103,000 students and a multicampus health science center. The remaining students are spread over the campuses of the Texas State University System, the

University of North Texas System, the University of Houston System and the Texas Tech System. Stephen F. Austin, Midwestern State, Texas Southern and Texas Woman's are each independent public universities. All told, we have about 520,000 students attending the more than 40 public universities in our state.

By contrast, California has more than 600,000 students enrolled at just 33 public universities. The granddaddy of that state educational system is the University of California, with 209,000 students spread over 10 universities.

How many people in this room think that Berkeley is the only center of excellence in the University of California System? Not a one of you. And that is because you know that in addition to Berkeley, the University of California System has UCLA, UC San Diego, UC Irvine, UC Davis and UC Santa Barbara.

Now here is a fact. According to the latest *U.S. News & World Report* survey, Berkeley, UCLA, UC San Diego and UC Irvine all outranked UT Austin for overall educational excellence. UC Davis and UC Santa Barbara were tied with UT—at 47th. And the rest of our universities? Texas A&M was ranked 60th. SMU ranked 70th, Baylor 81st and TCU 105th. Rice was ranked 17th, right up there with Johns Hopkins and Vanderbilt and above Berkeley.

Hold that thought: The “overtaxed, over-regulated, left-coast state” of California has within one fleet six universities that are ranked equal to or better than UT Austin, our flagship.

Now let's broaden our aperture a little by looking at membership in the Association of American Universities, which is regarded by most scholars as the definition of the cream of the crop of research universities. The AAU consists of 60 U.S. and two Canadian universities. These 60 U.S. schools garner about 60 percent of all federal R&D dollars; they are home to 82 percent of all elected members of the National Academy of Sciences, the National Academy of Engineering and the Institute of Medicine—the highest recognition in each of those fields. Since 1999, three quarters—74 percent—of all Nobel Prizes were won by individuals who were faculty members at AAU universities. It is fair to say that everyone in this room would like to have our Texas universities included in this prestigious group of 60.

California has nine AAU members: UC Berkeley, UCLA, UC Davis, UC San Diego, UC Santa Barbara, UC Irvine, Caltech, Stanford and USC. Four of those are in the greater Los Angeles area alone.

New York has seven: Columbia, Cornell, New York University, Syracuse, Stony Brook University, the University of Rochester and the University of Buffalo. You actually should add an eighth by including Rutgers, which is within arm's reach of New York City.

And Texas? We have three: Rice, UT Austin and Texas A&M.

Think about that. The great state of Texas—the state I love to brag and boast about; a state of 24 million people that has a glorious history second to none—has the same number of AAU member universities as the city of Boston. And Dallas, my hometown, has none. Zip. Zero. Nada. Dallas, the eighth-largest metropolitan area in America, doesn't have a single top-ranked academic institution. We do have UT Southwestern, a top-tier medical school, of course. But a

medical school standing alone, no matter how good, is not enough in a world that is built on advanced technology and in-depth knowledge across many fields.

How can we expect to navigate our way into the economic future without a single elite university in our city? How can we expect Dallas to prosper in the Knowledge Age—the era in which economic prosperity and wealth will be defined by cyberspace, nanotechnology, robotics and biology and mathematics-driven financial expertise—without at least one established fountainhead of advanced knowledge?

On Sunday, Tom Friedman of *The New York Times* reported an interesting observation by Lucien Bronicki. An expert in geothermal energy in the Negev Desert, Bronicki met with Friedman at an Israeli university. Pointing to a roomful of students studying biomedical engineering, software development, electrical engineering and computing, Bronicki remarked: “These are our oil wells.” And Friedman added: “These are oil wells that don’t run dry.”

Economists may quibble about widgets and whatnot, but they are united on this: Education pays off. There’s an irrefutable positive link between education and income. We see it across countries, between individuals, in America’s progress over time and when comparing states. Little old Massachusetts, for example, with a third-place ranking in college graduates per capita, has lifted itself up to first in per capita income. California’s 11th-place ranking in education gets it 10th in per capita income. Texas ranks 29th in college graduates and 29th in per capita income, well below the national leaders in college-educated workers and earnings. Our neighbor, Arkansas, ranks 49th in both. Mississippi is 50th in income, competing with West Virginia, which is 50th in education. Imagine that: We are closer to Arkansas in educational attainment and income than we are to Massachusetts. I’ve got nothing against Razorbacks, Ole Miss or the Mountaineers, but that is not where I want Texas to be.

When we leave this luncheon today, I want you to look around Dallas’ cityscape. Tell me how many factories you see. You won’t see any—at least not any of the old-fashioned kind with smokestacks and loading docks and noisy machines. Instead, you will see glass and steel buildings that house the machines and the capital stock of the modern economy: human brains. The brain is to the Knowledge Age what the motor was to the Industrial Age. And education is the oil, the fuel that drives the knowledge economy forward.

Lately, we have been cooing and aahing over the Barnett Shale. We brag about the drilling rigs that are popping up all around D/FW Airport. All that is great. We need all the homegrown gas production we can get. But when was the last time the public attention given one rig was lavished on a student like J. Bradford Cutrell, the summa cum laude graduate in microbiology from UT who graduated No. 1 in his class at UT Southwestern last week, winning the top academic prize for having “a superlative medical mind”? Cutrell is an oil well. A homegrown one from Sulphur Springs, Texas. One that will never run dry.

We need more of him. We need thousands upon thousands of Cutrells here in Dallas. We can fuel our economy with graduates from California and Massachusetts and other states and other countries—up to a point. But that is no substitute for Texas- and Dallas-bred intellectual talent, with its roots in the community and its commitment to building Big D.

We never know enough in today's world and must embrace lifetime learning to achieve the American Dream. More and more, you earn what you learn. The U.S. economy today is far different than the one that employed our parents and grandparents in the fields and factories. Agriculture represents 2 percent of our national economy. Manufacturing employs only 11 percent of our workforce. Eighty-two percent of American workers are employed in services, a sprawling sector that includes some of the nation's most prestigious and highest-paying jobs. In Texas, average hourly wages in 2005 were \$77.23 for internal medicine doctors, \$44.81 for geological engineers, \$39.53 for computer software engineers and \$26.35 for registered nurses, according to Bureau of Labor Statistics estimates. Those are handsome earnings statistics. We want as many of our people as possible working in those income brackets.

China, the former USSR nations and India together have roughly the same number of college grads age 25-plus as the U.S. does—about 54.1 million. There's no way to stay ahead of the pack without constantly pushing to educate our citizens and also grabbing foreign graduates whenever we can. But we do the opposite. We bring them over here, teach them everything we know—often with U.S.-financed scholarships and always at schools endowed with private U.S. monies and taxpayer funds—then send them back home by denying them citizenship! That has to be the most ridiculous investment paradigm ever, anywhere. We are in essence financing their capital plant and denying ourselves a return on our investment. It is as though we are spending a million dollars to drill a well in the Barnett Shale and then giving away the gas we find.

Question: How do we compete with the masses of Chinese and Indians and Eastern Europeans and Vietnamese and Mexicans and Latin Americans who can grow and make stuff so much cheaper than we can? How do we stay ahead of them as they begin to move up the value-added ladder into the service sector, into technology, into programming and into software and the sciences?

Non-answer: by closing up our ports and protecting our economy. We know from the 1930s what that does. Protectionism is a political prescription for economic ruin.

Answer: We stay ahead of our competitors. We move even faster up the value-added ladder. How? By using our brains—that area my father used to describe simply as “the little one-quart jar between your ears.” Our brains are our capital equipment. The brain is to the Knowledge Age what oil and electricity and mass production were to the Manufacturing Age. We need to nurture and grow more Brad Cutrells. We need to attract and retain every foreign brain we can. We need to provide them with academic homes they will want to come to and then stay around and add value to. We need to house them right here in River City—right here in Dallas.

If any of you leave this room today willing to accept the fact that Dallas, Texas, does not have one university ranked in the top 60 by either *U.S. News & World Report* or the Association of American Universities, then you are not the Rotarians whom I know and love. If any of you are willing to accept that David Daniel at the University of Texas at Dallas or Gerald Turner at Southern Methodist University or Kern Wildenthal at the University of Texas Southwestern Medical Center or Victor Boschini at Texas Christian University or Jim Spaniolo at the University of Texas at Arlington is fighting with one hand tied behind his back because the powers that be in Texas cannot rise above parochialism and give to this city what California has in San Francisco and Silicon Valley, or Los Angeles or San Diego or Santa Barbara, or what

New York has in Manhattan, Rochester or Buffalo, then, well, you, my friends, are in a serious state of denial.

And if you of all people, you as Rotarians, the Marines of civic life, cannot figure out a way for this city to win on the battlefield of higher education, then woe is the future of our beloved Dallas.