

Speech to the Atlanta Rotary Club

2-1-10

By James W. Wagner

I was invited to talk today about the economic impact of colleges and universities in their cities. What is their role in a city's economy?

Despite the fact that economic impact has not historically been the principal mission of institutions of higher learning, the question is a good one. It is a good one because the role of these institutions with ancient roots has expanded, quite suddenly in fact, to include responsibilities whose qualities and values can be expressed in part in economic terms. Unfortunately, in a way, there exists no real market exchange to log and keep track of these values. Few universities are for-profit institutions with public offerings of stock. So it is up to the institutions themselves to collect and report the data, to be able to advise people of the economic status of their community investments in their cities' universities and colleges. So it is a question that I am pleased to try to help answer—in part, because I think you will like the answer. The answer gives us all another good reason to value higher education.

A little history first. In the earliest days, universities were not conceived and did not exist to produce economic impact. Were I addressing the Rotary a thousand years ago, there would be nothing to say on this topic. Hardly anticipating that there would be direct career application to students who chose to study there, our first universities, founded in Europe, offered only seven courses of study, all designed to stimulate a life of the mind apart from the necessities of making a living. Later, in the North American colonies and the early United States republic, far from imagining that they would be an economic engine for cities, colleges and universities followed monastic models, often locating in remote areas, away from centers of commerce and enterprise. To this day, we find many fine colleges and universities in rural areas and small towns throughout the country.

Most of our earliest institutions in this country were founded with religious roots. Emory itself enjoys a continuing relationship with the United Methodist Church, with our Candler School of Theology among the very finest schools of

theology in the country, housing also the largest Methodist seminary in the world! In the earliest universities, faculty and students even clothed themselves in the robes of monks and clergy. We still roll those regalia out for our most formal academic ceremonies. But times and expectations change.

In the mid-nineteenth century, science and technology were only reluctantly incorporated into the scope of university education. You see, until then, colleges and universities were intended (as it has been said) “to prepare a literate clergy, educated gentlemen, and a necessary supply of lawyers and doctors.” But technology and science soon were being taught in the U.S. At first, only the military academies produced engineers (military engineers), but the operators of railroads and harbors diverted those military engineers from their military careers until enlightened educators and wealthy industrialists like Stevens and Rensselaer founded academies specifically to produce civilian engineers—“civil engineers.” And so it was now clear that universities could have a direct role contributing to the industry as well as the intellect of its students, and that our nation’s economy could benefit from higher education. Lincoln signed the Morrill Act granting Federal lands to the states to be used or sold to establish colleges, charged with the responsibility of advancing our nation’s agricultural, scientific, and engineering base— a program that is part of the history of the University of Georgia, North Georgia State, and Fort Valley State.

The twentieth century introduced terms like “research university” and “academic medical center”—terms that had for centuries never been a part of the academic lexicon. Terms that referred to big ticket items that could be spoken of in financial terms. You see, it was not until July 5, 1945 when Vannevar Bush, the director of the Office of Scientific Research and Development, sent his report to President Truman—a report that to this day remains in print as a monograph titled “Science—The Endless Frontier” It was not until then that this nation imagined an even further expanded role for our universities. Bush recommended that, unlike in the past, our nation should rely principally on our universities to explore and advance the frontiers of science.

And, so, our nation established the National Science Foundation, defense offices of research, and later the National Institutes of Health, investing more in university research and less in the expansion of national laboratories. This was in sharp contrast to science policies of other nations, where entire cities were set aside for research, like Tsukuba City in Japan, and like the cities established by the Soviet Union so numerous that they were given numbers rather than names. Bush's recommendation and our country's investment in universities paid off "big time," and it was another formal step in furthering the expectation that universities could and would be engines for something in addition to ideas and learning. As recently as 1980, the Bayh-Dole Act took things still a step further and raised the expectation that universities would commercialize the intellectual property that they generate and, through patenting, licensing, and royalties could gain financially from it. The government expected that universities should be generating outputs that would be both profitable and contribute to the national security.

Student expectations changed as well. TV ads shouted to young people, "To get a good job, get a good education." Students began to expect that universities would provide job placement services. Students and their families began to link prospects for individual economic prosperity to the acquisition of college degrees.

So now that our colleges and universities have added these responsibilities and acknowledged these added expectations to contribute to personal and public prosperity, what have they become, and are they upholding their end of the bargain?

The answer to the second question seems to be yes. Universities have had a positive impact in their communities and have, at the same time, developed internally in positive ways. We have come to understand the value of collaboration and partnership in new ways. We are no longer operating in that old monastic mode, isolating ourselves from the outside world and from each other. We understand now that we achieve more as a collaborative rather than as a collection—that much of the exciting work of our time is in the interstices between traditional disciplines and in the engagement with other institutions outside our walls. We are becoming more of a Uni- Versity, rather than a Multi-versity of independent silos

operating in competition. We embrace collaborations and partnerships as keys to interdisciplinary work and means to leverage potential.

The internal spirit of partnership spreads beyond the campus as well, as the growing number of strategic partnerships indicates. Georgia Tech and Emory enjoy a distinctive partnership in biomedical engineering, now considered to be number-two in the country, and just last year our two institutions launched a joint Ph.D. degree program with Peking University in Beijing, China. Other partnerships in global safe water, predictive health, and biomedical informatics promise the possibility of similar distinction. Other teaching and research agreements engage Emory with Agnes Scott, Georgia State, the University of Georgia, Morehouse School of Medicine, and the Medical College of Georgia.

And the results? According to data compiled by the Atlanta Regional Consortium for Higher Education and published most recently in May of 2008, our Atlanta area colleges and universities have performed remarkably as economic engines. They (1) employ over 55,000 people, (2) expending annually nearly \$6 billion in operations, and 3) \$1 billion for research—all of which places Atlanta among the top ten cities in each of these economic categories. Individually, many of our Atlanta colleges and universities command budgets that would list them in the Fortune 1000 list. Emory itself, with over 22,000 employees (the third-highest in the region, after Delta and Wal-Mart) and with an annual budget of nearly \$3 billion, performing nearly a half-billion dollars of externally funded research each year, and with intellectual property income bringing in substantial license and royalty fees, would rank in Fortune 700.

Owing to the vibrancy of the higher education sector of the Atlanta economy, the City of Atlanta has bragging rights among the fifty largest cities in the U.S. for being in the top ten for these categories in higher education:

- Total student enrollment (7th)
- Total number of student of color enrolled (9th)
- Total number of African American students enrolled (3d)
- Total degrees awarded (Bachelors and above) (7th)

Of fifteen disciplines in which Atlanta universities and colleges graduate students, here is how Atlanta ranks nationally in number of degrees awarded:

- Biological and biomedical (7th)
- Health professional and clinical sciences (8th)
- Computer and information sciences (5th)
- Engineering and engineering technology (3d)
- Mathematics and statistics (8th)
- Physical sciences (9th)
- Architecture and related services (6th)
- Business, management, and marketing (7th)
- Communications, journalism, and communications technologies (8th)
- Education (8th)
- English language and literature (8)
- Foreign languages, literature, and linguistics (7)
- Theology and religious vocation (6)
- Visual and performing arts (8)

And we could talk also about the economic impact of:

- Students, families, visiting alumni as retail consumers;
- National visibility from collegiate sporting events;
- Patients traveling from beyond our city and state for healthcare services (Emory sees four million patient encounters each year alone.);
- Spinoff companies that add jobs and attract investment;
- The lure that strong colleges and universities have in attracting companies like NCR to relocate here;
- Volunteer services provided by our students and academic communities (Emory was chosen as one of six among 635 universities nominated to be on the national honor role for community service)

Atlanta's higher education sector thus seems to provide for us a competitive advantage over most cities in the country and indeed the world. Perhaps it is an advantage that needs to be better understood and called into play more often. I can assure you that our institutions would be pleased to help do just that. After all, unlike pro sport franchises or Fortune 100 companies, our colleges and universities are here to stay. Our rootedness in Atlanta is permanent. This IS our community in a way far different from other kinds of enterprises. We care and throw our lot in with the community in a most committed way.

Before closing, allow me to make one important additional point about the value of the higher education sector. The economic numbers that we just reviewed and the competitive rankings of our activity all indicate how well we are doing—how it is that we are a good investment for our federal government, our communities, our students and graduates, and foundations and donors. Clearly, we have embraced the challenges and the fortunes thrown our way to grow beyond being only intellectual hot houses to be also economic engines. We can and should be pleased and proud of our economic and otherwise competitive successes. I told you that you would like the answers.

But while *other* kinds of enterprises can and do contribute to economic vitality, there are certain missions that only colleges and universities can fulfill. Even as universities have embraced new roles by providing professional preparation for people to serve in law, business, engineering, agriculture, architecture, teaching, nursing, medicine, public health, and theology—all of which teach us how to live and how to make a living—we must not allow our new status as economic engines to replace or absolve us of our responsibilities to continue to explore also the “whys” of life. Few places (do any besides our colleges and universities?) provide space and time protected for the pursuit of the most fundamental questions of life, places where ambiguity is accepted (even valued), where a forum exists that invites— or better yet insists upon— bringing people together with violently opposed views so that they can engage nonviolently—where ideas do battle but not people.

How do we talk about and explore the relative merits of ideas with language that transcends the limitation of mere reason in the pursuit of truth and joy? The

languages of rational prose and of mathematics and economics, as precise as they are, are also limiting. Whether by original design of creation or owing to original sin, we as humans suffer with an inability to express fully how we feel and what we mean to and for each other. Words are crude tools of communication. Photographs are too flat. Words and photographs just won't do it. We want adventure and experience of the world first hand, we want to encounter people and places more deeply—our neighbors with whom we dined together today as well as those around the globe.

So there will never be enough great prose or poetry to attempt to capture our feelings on paper. We need the genius of those who can better say than we can just what it feels like to stop by a woods on a snowy evening. Scholars are needed to tell us what history means. We need composers and performers who through music try to convey what words cannot. We need artists who with shape and color are able to express what even endless conversation could never do. We need those who can imagine new ways to peace—personal peace and political peace. We need physicians and health and public health professionals whose passion is to heal people, not merely cure disease, lawyers who understand that their role goes beyond arguing the rules and loopholes but is focused at least as much in building and maintaining what my colleague and friend Ben Johnson has called the thin veneer of civilization. We need captains of business whose talent and passion for wealth creation is motivated at least as much by a commitment to society as it is for personal gain. We need politicians with the wisdom and moral courage to provide for us what we need, not merely the street smarts of appeasement that works to satisfy us with only what we want. Our colleges and universities are, almost exclusively, the intellectual breeding ground to produce people and ideas to meet these vital and timeless needs of society. We in universities must not shirk our responsibility or be made to feel that we must apologize for fueling a life of the mind even in apparently impractical and unprofitable ways at times.

I am proud that higher education has come to be such an important cog in the economic machinery of our cities, but I am certain also that we must not succumb to the temptation to neglect our duty to serve in other ways that are equally critical to

our cities and to societal well being. Many have observed, perhaps Bill Gates most recently, that one cannot have a great metropolitan area—city or region, if you will—without great universities, museums, orchestras, and theaters, not so much for their direct economic value (though we know now that in the case of universities that is significant), but for their broader social value which will be reflected in the vibrancy of our cities, including economic vibrancy.

I was asked to speak with you today about universities and economic impact. I hope that you agree that the economic impact of our colleges and universities is remarkable, even surprising. The impact of the economic mission *on* our universities has been similarly positive, so far. But heaven forbid that the favorable impact from our economic mission should turn the ivy of our campuses into a kudzu that, although doing exactly what it was originally imported to do, could threaten to overgrow in areas into which it does not belong, stifling the broader mission of our centers of higher learning and risking the vitality of our cities.

Please accept my pledge to work to ensure that our universities will continue to grow in value as balanced and powerful contributors among the broad ensemble of partners that make Atlanta great.