

CITIZEN-SCHOLAR



UT, LIKE ALL UNIVERSITIES, CAN DO A BETTER JOB IN SERVING SOCIETY. THESE DISTINGUISHED UNIVERSITY AND COMMUNITY FIGURES OFFER A FEW REASONS WHY IT SHOULD AND SUGGESTIONS OF HOW IT CAN

★ SERIES COMPILED BY PROFESSOR RICK CHERWITZ

Getting Scholars Engaged in Community

by Rick Chervitz

THERE IS A MOVEMENT AFOOT AT THE UNIVERSITY OF TEXAS and other public research institutions across the nation — a movement to bring higher education out of the 19th into the 21st century. With rising tuition, limited access to the University, and increasingly complex social problems, the need for public institutions to fulfill their compact with the citizens of the state is more important than ever.

There is a critical mass of UT faculty who take this compact seriously, viewing themselves as citizen-scholars — researchers supplying more than narrow, theoretical disciplinary knowledge. They exemplify “academic engagement,” taking to heart the ethical obligation to contribute to society, to discover and put to work knowledge that makes a difference.

Too often, though, inflexible administrative structures, historically embedded practices, status quo thinking, and inertia inhibit full realization of this ethical imperative.

Among the daunting challenges confronting universities aspiring to academic engagement are these:

- How do scholars, who live primarily in a world of ideas, develop the rhetorical skills needed to incubate and sustain projects requiring fiscal and intellectual investment by stakeholders inside and outside the University — skills typically disassociated from the scholarly enterprise?

- How can faculty members integrate, synthesize, and unify knowledge to permit solution of complex social, civic, and ethical problems? This is an enormous challenge in

an academic culture that former Brown University president Vartan Gregorian says “respects specialists and suspects generalists.” How do we ensure the continued proliferation of specialized knowledge, while concurrently encouraging renaissance thinking?

- How can faculty members who engage in public scholarship flourish given restricted measurements for assessing performance enforced by universities and academic disciplines? Incentive systems not only fail to encourage public scholarship, but may actually devalue research that simultaneously contributes to society. What changes to institutional reward structures are requisite for academic engagement?

- How can faculty members maintain standards of academic integrity and objectivity, while participating in community projects in which they may become ideologically vested or serve as change agents?

- How should academic institutions recalibrate methods for creating and delivering knowledge? Because, historically, original thought, lone discovery, and disciplinary contribution are considered more important than teamwork, what changes are needed to effectively address problems requiring multi-institutional, cross-disciplinary, and collaborative forms of investigation?

- How can academic engagement be achieved in an environment maintaining that research is two-dimensional, either “basic” or “applied” — a long-held, rigid dichotomy frequently invoked to deter faculty from venturing too far from theoretical knowledge?

- How might the entrepreneurial thinking that universities successfully deploy for technology-transfer analogously be used to empower all of the arts and sciences — to unleash a University-wide spirit of intellectual entrepreneurship? How might this

agenda be pursued while remaining vigilant to the sanctity of the academic enterprise?

- How can the University better apply its morally centered quest for truth to matters of public concern? How can it encourage public deliberation that benefits from many different opinions and challenges to received wisdom, without being perceived as relativistic or unpatriotic?

These are but a few challenges to citizen-scholars. Believing that awareness and diagnosis of the problem is the first step to solution, this issue of THE ALCALDE begins a conversation about how to make the academy — a culture that far too often resists change — more responsive to the needs of society.

Some of UT’s eminent scholars — including a poet, philosopher, neurobiologist, economist, theater historian, pharmacologist, and geologist — weigh in on this issue. They reflect on what must be done to harness the vast intellectual assets of the University as a lever for social good — about what it will take to fashion genuine synergy between the University and its community partners to transform lives for the benefit of society.

Concluding essays are written by the U.S. secretary of commerce, the chancellor of the UT System, and the executive vice president and COO of Seton Healthcare Network — all of whom take seriously the need for academic-civic

partnerships and increasing the accountability of educational institutions.

To be clear, this isn’t a venue for disgruntled and gadfly faculty members. Contributors are prominent researchers who, while understanding the distinctive mission of academic institutions, have spent their careers building connections between the University and community without apologizing for being scholars. They realize that creating a culture of academic engagement requires accountability and collaborative problem-solving in forthright public exchanges about how to enact change.

In this spirit, readers are invited to participate — to share ideas about how best to forge new, productive connections between UT and the community. Together we can make academic engagement more the rule than the exception; through collaboration it will become a defining characteristic of UT’s brand name, designating this institution one of the truly innovative and exemplary public sites of learning in this century.

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HOW CAN THE UNIVERSITY BETTER APPLY ITS MORALLY CENTERED QUEST FOR TRUTH TO MATTERS OF PUBLIC CONCERN? HOW CAN IT ENCOURAGE PUBLIC DELIBERATION THAT BENEFITS FROM MANY DIFFERENT OPINIONS AND CHALLENGES TO RECEIVED WISDOM, WITHOUT BEING PERCEIVED AS RELATIVISTIC OR UNPATRIOTIC?

Inside the Ivory Tower, but Touching the World

by Betty Sue Flowers



THE STRONGEST ARGUMENT I KNOW for academics staying in the ivory tower is this: academics serve society best when they produce new knowledge in their fields; and to produce this knowledge requires protection not only from the marketplace, which values only what it can measure, but also from society itself, with its short-term focus on today's desires or needs. Thus, research universities create an ethos of service to the field in the belief that to serve the field is to serve the world in ways that haven't even been thought of yet.

Even in fields like mine — poetry — arguments have been made for a different kind of usefulness:

It is difficult
to get the news from poems
yet men die miserably every day
for lack
of what is found there.

—William Carlos Williams
from "Asphodel, That Greeny Flower"

On the other side are the activists who argue that in an age of diminishing public support, academics in public universities don't have the luxury of staying in the ivory tower — and that the ethos of the academy must change so that it can learn to recognize and reward "service" in a more profound way. Perhaps the ivory tower itself is outmoded, they say, with its protective system of tenure and support for bizarrely obscure research topics.

As is typical of such disagreements, this one rests on a false choice — serving the field or serving the world. Both sides are right.

In an age that is grindingly economic — in which, it has been said, we know the price of everything and the value of nothing — the academy is one of the few institutions left that honors other dimensions of the human spirit. But anyone who has looked closely at the engine of our economic growth and at our amazing economic productivity as a nation gives immense credit to our individual enterprise and our creativity. While we fall behind many other nations in our primary and secondary education systems (at least according to standardized test results), we are second to none in our graduate education system, where we let researchers and students freely pursue the truth. And there is a direct connection between freedom and creativity and between freedom and individ-

ual enterprise.

Every UT student has seen the inscription on our Main Building: "Ye shall know the truth and the truth shall make you free." Academics might argue that this promise can be fulfilled only in a religious dimension; and that all we academics can offer is, "You shall pursue the truth, and the pursuit can set you free" — free of the

narrow confines of your habitual thoughts, free of the one-dimensional view of the world that comes from knowing only one culture, free of taking freedom itself for granted through ignorance of the sacrifices it has taken to gain it.

The world of the Tower — the pursuit of truth — is a powerful field for public service. But the activists are right, too, in their criticism of academia. At its heart, this criticism is not that academics are selfish or that their pursuits are irrelevant. What ignites the passion of these activists in their call for academics to serve the public more directly is their powerful vision of the missed opportunities. More than most academics, these activists know examples of the marvelous benefits that come from such collaboration — for the academics as well as for their communities.

At this point, a confession is called for. It was the "pursuit of truth" in my own field, literary criticism, which led me to ask: "What is the story that we are telling as a nation about who we are and who we might become?" The attempt to answer that question led me far afield from academic literary conferences into NASA, General Motors, the Pentagon, Shell International, The Centers for Disease Control, the World Business Council for Sustainable Development — and eventually out of academia itself and into more direct public service.

In the end, I think the core purpose of The University of Texas has it right: "To transform lives for the benefit of society." In this case, it was my own life, as an academic, that was transformed — whether "for the benefit of society" remains to be seen. But that is always a question to be answered in the long term, with the benefit of hindsight, by thoughtful observers, from a high vantage point — something like a tower.

Betty Sue Flowers is director of the LBJ Library and Museum and formerly the Kelleher Professor of English at UT.

To be engaged, scholars must share their ideas

by James K. Galbraith



I AM AN ACTIVIST IN MANY AREAS but University governance isn't one of them. My view of the work of colleagues resembles Thorstein Veblen's: idle curiosity is the noblest intellectual motive. Political pressure on university professors is abhorrent. The rat race of departmental rankings is distasteful. Once hired, faculty are best left to their druthers. Even noble efforts to call this unmilitary officer corps to larger common engagement are too heroic for me.

Yet someone has to raise and spend the money. University leaders have to decide which pursuits will flourish and which will slowly wither on the budget vine. (As a recent president of Harvard allegedly said to the Divinity School: "Let God provide.") I do believe that engaged scholarship deserves a larger share, at least in the narrow spheres of social science where I spend my academic days.

So far as my home discipline of economics still has a philosophy, it is positivist: concerned mainly with symbolic language ("theory") and then with testing hypotheses about that theory. The language of both endeavors is deeply hermetic. And the peer group able to read and review the work is small.

It's not that I begrudge my fellow economists their models and regressions. But do we really need so many of them? Can we afford so little work on defining social problems, on measuring facts, on policy design? Where, if not in economics, government, and sociology, should our University deal with poverty and racism, with prisons and schools, with immigration and inequality, with public purposes such as health care and retirement, and with the security issues of war and peace, world development, and our energy budget? Public policy can't do it all.

And how should a professor communicate? Only to her peers? Or to the wider world?

My own philosophy is pragmatist. It is concerned with solving problems and propagating ideas. For a pragmatist, ideas are not a scholar's property. They are not a commodity or a brand. They are, instead, the common understandings of a community. Ideas exist only to the extent that they are shared.

A scholar taking this viewpoint must be engaged. Pragmatic scholarship is no enclosed pursuit, but a link in a chain of communication extending from the University in many directions. For some, the preferred direction is upward, to the ear of persons in power. To others, it is outward, through the press and by participation in political organization and civic action. And for us, as for all other

teachers, our philosophy also suffuses what we teach to our students.

Communication outside the journal and the classroom is an art form. It obviously doesn't take much to go on some cable TV shout show. But the craft of a good op-ed, syndicated column, radio commentary, book review, policy essay, or pamphlet must be

learned and practiced. (They're all different, by the way.) These arts are no substitute for journals and books, but they have a necessary place in effective social scholarship. Today it's a rare professor who reaches a wide audience indirectly and without effort, through tireless promotion by students and disciples. And I'm not one of them, alas.

Engaged scholarship demands a spirit of respectful tension with peer review. Economics suffers today from high formalism, rigid orthodoxy, and tribal exclusiveness in professional journals; real-world scholarship is not prized and not easily published. But fortunately, with the Internet the costs of publication are falling. New journals are springing up that can peer-review effectively at low cost, and this will one day cause the breakdown of our ossified system.

In a world of virtual journals and electronic working papers, scholarly engagement has a better chance. Let's hope that quality will still be distinguishable from junk.

Finally, for the engaged scholar there is always the tricky issue of the role of values and politics. Some scholarship is intrinsically apolitical but social scholarship can't be. The policies I support grow from my ethical and political beliefs, to which my expertise (such as it is) merely adds an element of engineering. And yet, of course, a professor is not a missionary. A profound obligation is to respect the ideas and views of students who come in with different values.

My approach to that is to declare my own politics frankly — I'm a liberal Keynesian Democrat, in case you didn't know. But I try to preserve my classroom as a space for respectful discourse with all points of view. And, sometimes, you pull it off. Some years ago, a student wrote these words on my confidential end-of-semester evaluation: "It pains me to say this, but you are the best professor I've had — even though you are a communist."

As my late friend Walt Rostow liked to say, in this business you never know when you're making a nickel.

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Lessons a Philosopher Can Teach a Capitalist

by Robert C. Solomon



I USED TO ADMIT IT IN CASUAL conversation: "I am a philosopher." The response was usually a dead silence, or worse, the question, "What's your philosophy?" Depending on my mood, I usually answered, "A stitch in time saves nine" or, "A penny saved is a penny earned."

But for the past decade or so, I say that I am in "philosophy and business." That gets the more welcome if still perplexed response: "That's an interesting combination."

Indeed it is. The ethereal and the practical in a single package. The eternal verities combined with the rough-and-tumble pursuit of profits. To me, it says something important about what both philosophy and business are about, and why they need one another.

First, philosophy. I do not say — although it is obviously true — that I am a philosophy professor. I do profess, and I take considerable pride in my teaching. But even in the classroom, my aim is not just to convey the wisdom of the ages but to give the students something they can use to live better lives and be better citizens.

And out of the classroom, too, being a philosopher means speaking to real people about their real quandaries. It was the model Socrates (and at the other end of the world, Confucius) set up for us more than two millennia ago. They were citizen-scholars, exemplifying learned engagement, as my colleague Rick Cherwitz noted in these pages, taking to heart the ethical obligation to contribute to society, to discover and put to work knowledge that makes a difference.

Socrates and Confucius may have had some esoteric ideas, but they lived their lives out in the streets, talking to people, especially the people who were in charge, people who could make a difference and set an example for everyone else.

On to business. We are a business society. For better or (more likely) for worse, corporations rule much of our lives. Many of the people who are in charge, those who could make a difference and set an example for everyone else, are those who work for or work on the behalf of our corporations.

So, this is a job for philosophy.

But corporations function according to a simple-minded and (one could argue) pathological philosophy: the single-minded pursuit of profits.

Not included: personal and family values, religion and spiritual values, love and friendship, a sense of community, a sense of patriotism, local loyalty, a sense of non-contractual obligation to employees, managers, customers, vendors, and the environment.

Not that these values do not exist in the corporation, that is, in the lives and worldviews of the thousands or hundreds of thousands of people who work there. But they face "mar-

ket forces" that are oblivious to all values but one. Paying attention to customers, treating employees well and establishing a reputation for respecting the environment may be good business insofar as it is conducive to the successful pursuit of profits. But it is only the best businesses that consider these values not just instrumental but as essential and incorporate them into their philosophy. We need to engage with

them.

How about business schools, what are we teaching to our students?

The answer, according to the latest research, is disappointing. Business schools act as employment agencies not only with regard to talents and abilities but to assure employers and the public that graduates have some sense of integrity.

Some CEOs (and some business professors as well) simply assume that "they all went to Sunday School," but ordinary ethics does not make it clear what accounting procedures are honest, fair, or appropriate.

There are not enough business professors who specialize in business ethics, but what we need are not only more business ethics courses but the ethical framing of all business studies.

Consumers are not just innocent victims here. They, too, often adopt the same one-dimensional, one-value, pathological philosophy. The best price, the best bargain, not as a matter of need but as a matter of personal pride and policy. Does one bother to find out or care where or how a product was made, what its real costs are in terms of the abuse of workers (even children) and environmental degradation? The vicious circle, of course, is that many corporations justify their philosophy on the basis of this consumer philosophy.

It is the philosophy that we must change. That is no easy task. It does not mean an end to capitalism, an end to profits, or a lower standard of living. It means engaging in what philosophy has always been about, speaking values to power, talking seriously with the people who run our corporations and consumers, and working out ways of optimizing the values we share.

That is what a philosopher does in business, and that is why — as in so many other matters — we are all philosophers.

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BOB NAGY

Why It's Vital We Study the Science of Addiction

by R. Adron Harris and Carlton K. Erickson



THE PROFESSOR FOR UT AUSTIN'S UNDERGRADUATE COURSE "Neurobiology of Addiction" begins the semester by asking who intends to obtain a master's or doctoral degree. Many students raise their hands.

The professor then asks: How many of you will die of addiction? No hands go up. The instructor explains to students that they have it exactly backwards — it is likely that more will die of addiction than will complete graduate degrees.

One wonders whether enrollment in this class or academic research conducted by faculty can reverse such an outcome? More to the point: Does the University's academic structure stand in the way of discovering and putting to use knowledge important to society?

Addiction science is multidisciplinary, controversial, not usually supported by large foundations, donors, businesses, or most government agencies — exactly the sort of obstacles not easily overcome by the University.

Many of the barriers to addiction research are shared with other complex scientific problems. First is the challenge of academic geography. At UT, addiction expertise resides in neurobiology, pharmacology, psychology, and social work. These sites of knowledge are housed in four separate colleges, each functioning as a semi-feudal domain that inadvertently limits collaborations across academic units.

Second is the matter of funding. The University provides little monetary support for research; investigators must obtain money from donors, businesses, or government agencies to support their science. This is a wonderfully entrepreneurial system responsible for tremendous advances produced by American science, but, sadly, addiction receives relatively small amounts of funding compared with other health problems.

Why don't stakeholders — taxpayers, donors, and the University itself — make addiction research a priority? Part of the answer is that addiction is still seen as a moral failing unlikely to be improved by science — despite the overwhelming documentation by researchers that addiction is a brain disease. The role of genetics in susceptibility to addiction is established and the 're-wiring' of the brain during addiction is as clear as the reprogramming of the cells that become cancer.

Where people's beliefs get short-circuited is when addiction is mistaken for voluntary overuse of drugs such as alcohol, a problem common among college students. Certainly not all alcohol drinkers are "alcoholic" or alcohol dependent. We know that some drug misuse is a behavioral problem. But "addiction" is a state beyond simple bad behavior, and an unwillingness to recognize this ultimately prevents us from saving the lives of people who are truly dependent on drugs such as alcohol and nicotine. These people desperately need new therapies now being developed by addiction scientists.

Why have academics been so unsuccessful in establishing this perspective in public consciousness? One issue is personal accountability. If addiction is a disease, are addicts somehow less responsible for what they do under the influence of drugs? No! In Minnesota, a diabetic with a history of blacking out cannot get a driver's license. Just like the diabetic, there is no need to absolve the addict of anything.

Another issue is the lingering and false dichotomy illustrated by the frequent question of students: Is addiction "psychological," or is it "physical"? All behavior is represented in brain chemistry. Brain imaging studies dramatically illustrate that psychotherapy changes brain function, thus psychological is physical. The pathological changes in brain function associated with addiction are as real as those produced by Alzheimer's disease, but it is difficult for many people to accept that the emotions and behavior and the loss of humanity produced by addiction are represented chemically.

To address these issues, addiction researchers must have a mechanism for easily collaborating with their colleagues in other disciplines — including those in the humanities and social sciences who study human attitudes and behavior. In addition, scientists should be encouraged (and rewarded) by the University to spend time communicating new research findings and working with those sectors of society for whom their knowledge matters. Such multi-disciplinary effort and communication will elicit open dialogue, create fuller understanding of addiction, and correct many of the misperceptions people have about drugs and addiction.

The questions raised by Rick Cherwitz in the introductory essay on academic engagement, therefore, are manifested abundantly in addiction research. While the University is beginning to change, the discovery and delivery of knowledge remain primarily the jurisdiction of autonomous departments and colleges who compete for University support. Moreover, the emphasis for tenure and promotion is placed on individual research accomplishments — despite our realization that teamwork and the communication of knowledge are essential to solving complex problems.

The time has come to change the structure and reward system of academic institutions in a manner that will produce networks of ideas and people able to fully understand addiction and other complex diseases. Only then will science serve as a positive agent of change.

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Educating and Inspiring Scholar/Artist/Citizens

by Jill Dolan



MY COLLEAGUES AND I, WHO TEACH in the “academic area” of UT’s Department of Theatre and Dance, recently shifted our curriculum from a more conventional emphasis on theater history and criticism to what we call “performance as public practice.” We believe that theater, as a public forum, can be used to engage relevant social issues, as well as to offer pleasure, beauty, and deep feeling to audiences. We see performance as meaningful in our daily lives as citizens, rather than a special or, worse, “elite,” event. We also work with colleagues around the University to build stronger community ties and to facilitate arts-focused public forums across disciplines.

We research and teach community-based theater, the social history of theater, the performance of identity, and the civic influences of popular culture, among other topics, all integral to any study of theater and performance. Yet when we made this change in emphasis, some faculty found it heretical that we would amplify the language of scholarship — history, criticism, theory — with language that acknowledges audience, community, and research as something that’s part of a range of daily practices. Where does this suspicion come from? Why is it that “public,” when added to scholarship, is suspect?

“Public” implies “political,” which makes people attached to “objective” scholarship quite nervous. Our program is political, but not partisan. We aim to create a community of what we call “scholar/artist/citizens,” who refuse distinctions between theory and practice and who insist on the importance of their work to participatory democracy locally and nationally, even globally. Students hunger for such relevance; applications to our program have increased more than 100 percent since this change.

For example, I taught a graduate seminar last spring called “Public Intellectuals and the Arts.” We scoured contemporary and historical theater and performance for people who speak with sophistication and civic commitment to wide audiences about the arts, so that we can have role models for our work.

We also studied diverging perceptions of public intellectuals. Russell Jacoby, in *The Last Intellectuals*, and Edward Said, in *Representations of the Intellectual*, for instance, suggest that public intellectuals should be “outside” official positions, so that they can, in Said’s words, “speak truth to power.” Jacoby disdains universities for breeding conformity and stifling originality. And yet these commentators leave public intellectuals in an untenable situation, denying the steady financial support necessary to be the gadfly who promotes a consistently critical civic position.

Richard Posner, in his rather conservative *Public Intellectuals: A Study in Decline*, says public intellectuals must be older — most likely emeritus professors — to be free to make fools of themselves in front of their colleagues. Yet the academics I know who are most eager to shift their work into public practice are young people

determined not to keep their ideas enclosed in ivy-covered walls, who fear social stasis and their own irrelevance much more than appearing the fool.

I believe a public intellectual is not the safely retired professor or the cranky, marginalized outsider, but someone with something timely and important to say. The point isn’t to be a pundit with a deadline for her next pithy public commentary. The point is to use our expertise and our knowledge to add passionate, nuanced arguments to public debate by doing what we do best: commenting on and archiving what happens at the theater and what it means and demonstrating how performance can help us practice (in the theatrical sense of “rehearse”) more just, more equitable, more loving ways to live.

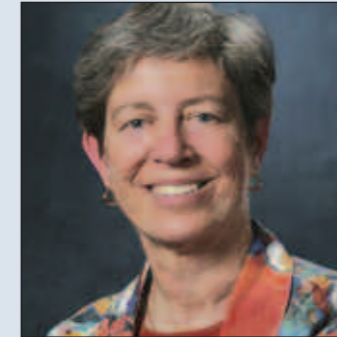
I teach my students to imagine particular audiences for their research. We ask, What’s important right now, in this historical moment? What do I want to say and why? To whom do I want my words to speak? And most importantly, Who cares? The question is not necessarily what’s original (a scholar’s usual question), but what’s urgent? What can I say about this performance that will communicate how it changed my world, if only for a moment, how it gave me an idea of how we might feel and act differently toward one another?

I believe deeply in performance’s power to make the world better. Because I feel the possibilities of community constituted anew each time I go to the theater, my scholarship is intensely public. We need to participate in such publics, which allow us to practice our urgent faith in a different future. We need to revise the typically hierarchical relationship between the university and the community, and the characteristically constraining structures of the academy, so that scholar/artist/citizen-inspired values can flourish.

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Bridging the Gap between Town and Gown

by Patricia A. Hayes



I GREW UP WITH THE CLASSICAL university ideal of excellence in three critical areas — research, teaching, and service to society. As a graduate student at a great research university and teacher/administrator at two wonderful teaching universities, I confirmed my understanding of and support for the first two prongs of the triad. In 1998 I left academia for an administrative role in a large healthcare organization that touches the lives of thousands of people and accounts for millions of dollars in public and private spending. In these six years in health care, my appreciation for the university mission of service to society has grown dramatically.

Many assign a hierarchy to the three university ideals. First is the academic ideal of great research. It requires comprehensive knowledge of the field, disciplined analysis, and the ability to make the creative leap to new knowledge. Without the evolution of new knowledge, the world would stand still. Research has always rightfully had status in the academic setting.

Teaching is often put in second place, but I would argue that it is just as important as research with openness and caring. With openness and caring, great teachers bridge the distance from a well-mastered field of expertise to the active minds of learners. From kindergarten to graduate programs, a great teacher is one who believes in the potentiality of others and integrates the thinking and learning of a lifetime with the experiences and questions of students.

If teaching can be put in second place, service to society is often a distant third. The argument is made that research is in and of itself service to society as is great teaching. I agree. But there is a third activity without which the greatness of a university is not fully realized. Our university town has seen the enormous value of technology transfer in creating a vibrant economy. We live with the amazing results of biology and chemistry changing the face of medicine and extending our lives. This service outreach needs to be intentional, and thus I fully support the commitment to what Rick Cherwitz in his introduction calls educating “citizen-scholars.”

So how can a university do this without diluting its strengths or overburdening its limited resources? I believe university communities could interact much more closely with the community at large using the framework that already is in place. In support of defining service more robustly within our public and private universities, I would make three practical suggestions:

1. Refashion our departmental and school advisory boards, moving away from public relations and fund-raising emphasis to a true structured exchange of excellence

between great researchers/teachers and great practitioners working in the field. This would be much more than a quarterly meeting at which the community representatives hear what good things are going on at the university; it would be peer dialogue structured for continued mutual learning.

2. Look at the rank and tenure systems at each university to provide more credit for truly great efforts linking the university and society. I understand that for a given university, every faculty member may need to achieve excellence in research or excellence in teaching. But the university falls short of its purpose if there are no rewards and recognition for the faculty who will also achieve great public service.

3. Develop faculty/business exchanges with a more sophisticated realization that those who achieve excellence in “doing” probably still remain novices at teaching and will need an academic mentor to be effective in such an exchange program. And the opposite is also true — that the greatest researcher or teacher in the university will be a novice if he or she has not had extensive experience in the multi-stakeholder, rapid-cycle business world.

Communities like Austin that are home to world-class universities have an opportunity to become much more involved in technological, social, and political structures if they can be more intentional about bridging the gap between town and gown. Service can be the connector between the university and the community and a fully developed ideal, not a stepchild of research and teaching. It is vitally important to advance service as part of the full university mission, and it will be critical to meeting the economic challenges of Central Texas over the coming decades.

Patricia A. Hayes is the executive vice president and COO of SETON Healthcare Network.

The Promise of Academic Entrepreneurship

by Donald L. Evans



GREAT UNIVERSITIES SHAPE NOT ONLY the people within them, but also the community and world around them. They prepare students to take on challenging careers, to embrace knowledge, and to define new frontiers. They also provide an environment for academics and researchers to study our past in order to envision our future, and to drive the innovations that move society ahead. This has a profound impact well beyond the ivory tower or the Forty Acres.

I applaud THE ALCALDE for this series of “academic engagement” articles designed to explore the issue of bringing higher education out of the 19th into the 21st century. Some very important issues have been raised by Professor Cherwitz and his colleagues in these pages, and, as former chairman of the UT Board of Regents, I appreciate the opportunity to provide some of my own thoughts.

While it is tempting to ask: “How does The University of Texas prepare for the future?” I think we should perhaps ask a more provocative question: “What does the future require of The University of Texas?”

Over the past three-and-a-half years, I’ve had the honor of serving President Bush and the American people as secretary of commerce. This has given me the opportunity to travel the country and the world, meet with national and global leaders, and talk to CEOs, entrepreneurs, and workers. I’ve seen the brilliance and energy that creates companies, drives organizations, leads to innovation, and seeks freedom. Feeding this brilliance and energy is a job much bigger than one university or even one nation, but it is exactly what the 21st century requires from The University of Texas and the United States.

We are at a defining moment in our history. We must prevail in a global war against an enemy that wants to destroy the foundation of our very society. At the same time, technology and communications allow us to bring hope and opportunity to more people than ever before. Invention and innovation place new goals and cures, once thought impossible, within our reach. And former adversaries have now evolved into our strategic allies and global economic competitors.

Our challenges are daunting, but the potential is unprecedented. History has placed this potential before us and given us all a great responsibility to meet it. Americans must engage all of our talents and ability in order to continue to be a beacon of hope and strength for the world. We cannot be bystanders. This nation’s academic community and leading universities are central in this effort. They create the spark. They provide knowl-

edge for those who seek it. And they must convert bystanders into participants. Thomas Jefferson called for an “aristocracy of virtue and talent” — this charge should drive our efforts today.

Realizing Jefferson’s virtuous aristocracy won’t be easy. Developments in information technology, biotechnology,

energy, and 21st century innovations like nanotechnology will create new jobs, careers, and industries. The potential for those who are prepared to meet the future is tremendous. But we must make sure the prosperity and opportunities awaiting us are available to everyone. Juan Enriquez, director of the Life Sciences Project at Harvard Business School, has speculated that we will see tremendous growth and prosperity as the future unfolds — but possibly in only a few zip codes.

The president recognizes that education is the key to overcoming disparities and creating equality. A cornerstone of his domestic competitiveness agenda is the landmark No Child Left Behind Act. This act changed the paradigm for education in this country by placing the priority on results and changing the culture of American schools.

We must build upon No Child Left Behind and make our education system as innovative and entrepreneurial as our economy. This means seeking new ways to reach students. This means redefining the very definition of “student,” because individuals don’t stop learning when they receive a diploma. We need effective lifelong learning strategies that recognize and assign value to knowledge gained over a lifetime. We need to embrace technology to teach and learn in new ways. Imagine an education platform that connects to young people in the same way as a Playstation. What if teenagers rushed home to play Einstein 2004 instead of Madden 2004? The possibilities are limitless, and those who pursue them will be true academic entrepreneurs.

I believe the future is calling The University of Texas and all the talented minds that drive it in unprecedented directions. True to the great pioneering spirit of Texas, we will no doubt reach a little higher and try a little harder to achieve goals beyond ordinary limits and expectations. What an exciting time to be an academic entrepreneur.

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We have cause to be concerned

by Mark G. Yudof



AS RICK CHERWITZ NOTED, these essays on “academic engagement” were conceived as a discussion about fashioning a “synergy between the University and its community partners to transform lives for the benefit of society.” Nowhere is that imperative more obvious than in our shared interest in the public schools.

Since the 1983 publication of the National Commission on Excellence in Education’s groundbreaking report, “A Nation at Risk,” policymakers have been preoccupied with how to improve public education. After all, the commission presented the situation in bleak terms: “For the first time in the history of our country, the educational skills of one generation will not surpass, will not equal, will not even approach, those of their parents.”

Over the years, we have seen many attempts to reform and improve the public schools, some more successful than others.

Most notably, the No Child Left Behind Act (NCLB) signed into law in 2002 is a broad effort to set standards and improve teaching methods. It seeks to foster empirically verified pedagogies, assessing with scientific rigor the impact of initiatives on students. It funds many of the tools we need to uncover the reasons that our students do not thrive in the classroom. It encourages research and development about childhood learning at the earliest ages — the time when intervention should be the most helpful.

The NCLB Act reflects continuing national concern that our children are not getting the world-class education required for their economic and social success and that of the nation.

We have cause to be concerned. Right now, Texas ranks 50th among the states in the percentage of the adult population with high school diplomas. We are 27th in college enrollments. A recent international study assessed the literacy levels of 15-year-old students from 41 countries in reading, science, and mathematics. Students from the United States ranked no higher than 15th in these areas. Here at home, the National Assessment of Education Progress, often called The Nation’s Report Card, ranked the achievement of eighth graders in reading, writing, and mathematics. By even the most favorable reading of the numbers, Texas ranked 12th in writing, 14th in reading, and 26th in mathematics.

These rankings would not be good news anywhere. For a state with a young, rapidly growing population and aspirations of greater economic leadership, they are potentially devastating.

At the University of Texas System and its 15 campuses,

we view public schools from the vantage point of end users. We are charged with offering the sons and daughters of Texas a world-class education that equips them for personal success and nurtures them as future leaders of Texas. Fulfilling that charge is made immeasurably more difficult when high school graduates do

not come to us with the skills to take advantage of what our institutions have to offer. For us, it is an issue of keeping the pipeline from the public schools to the public university filled with students ready to do outstanding work.

We have an obligation to be active participants in developing a continuum of education from pre-kindergarten to graduate and professional studies that is responsive to the needs of Texas and our students. NCLB has allowed us to participate in several research and development projects designed to help Texas students master early literacy skills. Among these are: the Reading First initiative, the Online Teacher Academies (for kindergarten through fourth grade teachers), and the Center for Improving the Readiness of Children for Learning and Education (CIRCLE).

To further underscore and enhance our commitment to elementary and secondary education, we recently created the Institute for Public School Initiatives. The institute will allow us take the outstanding research being done on our academic campuses and put it into action.

The institute’s work will address the critical challenges of public education including student performance, high school graduation rates, reading proficiency, and college attendance rates. Additionally, it will provide service directly to students and teachers and launch pilot programs. The idea is not to interfere with the work of local schools, but to collaborate with them in offering the best services, training, and consultation that we can provide.

The institute is only part of a much larger effort being conducted by many private and public institutions in Texas, all of them hoping to make the dire warnings of A Nation at Risk nothing more than an historical curiosity. The institute is a new effort, but we believe it is a good beginning — one that can help our schools work smarter.

Horace Mann described education as “the great balance-wheel of the social machinery.” We at the UT System are putting our shoulder to that wheel and working toward the day when the Texas public schools will be a model for the nation and a worthy competitor for elementary and secondary education anywhere in the world.

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Environmental problems require educational reform

by Jay Banner & Nelson Guda

WATER IS A CRITICAL NATURAL resource around the world, and in Texas it is a particularly fragile one. Texas history is replete with accounts of water shortages, including those affecting 19th century settlers, the Dust Bowl of the 1930s, the 1950s drought, and the Rio Grande failing to flow to the Gulf of Mexico in 2002. In the mid-19th century, little more than a billion people populated the planet. Today, as we surpass 6.4 billion, water issues are even more severe and widespread.

The United Nations estimates that waterborne diseases cause five million deaths each year, and that by 2025 two in three people worldwide will face water shortages. In our own backyard, less visible problems include a class of contaminants recently detected in water resources: pharmaceuticals. That's right, the water we use can contain such compounds as ibuprofen, Prozac, caffeine, antibiotics, birth control hormones, and Viagra.

These facts underscore growing concerns about the quality and security of our environment, particularly the vital resource that is water. How far can technological solutions, such as desalinization of seawater, take us? How much freshwater flow is needed to protect wildlife habitats within streams, aquifers, and estuaries? What new challenges will we encounter in the face of a projected doubling of Texas' population by 2040 and shifts in regional rainfall patterns driven by global changes in climate? Will there be sufficient quantities of clean water for drinking, agricultural, and industrial needs? If answers to these questions are not found, future Texans will be unable to balance the use and renewal of water resources, and we will continue on a path that is not sustainable.

Our ability to answer these questions depends in part upon our ability to educate tomorrow's students with an interdisciplinary perspective reaching beyond narrow specializations. As noted by Professor Rick Cherwitz and other contributors to this issue of *THE ALCALDE*, scientific and learning breakthroughs often occur at the intersection of different disciplines. The interconnected nature of environmental problems is no exception. We need professionals trained to understand complex water problems from a variety of angles, including science, engineering, urban planning, business, and policy. Unfortunately, few graduate programs exist that educate students beyond a chosen discipline.

Scientists with a deep knowledge in their field of specialization will continue to be essential for advancing knowledge, but the importance of a broad perspective is rapidly increasing. Universities must formulate major improvements in how they engage the community and bring new knowledge from researchers to the public, in order to reverse the trend of the shrinking numbers of stu-



dents in the United States who choose science and engineering careers.

So how can we meet these challenges of academic integration and engagement? Do we eliminate existing academic departments and realign resources into new departments? Or, can new cross-cutting organizations meld traditionally sep-

arate disciplines? Answers vary, but the assortment of environmental programs recently formed in different U.S. universities indicates that no blueprint exists.

On a federal level, the National Science Foundation, a leading agency funding university research, now requires that such research has impacts beyond a small circle of specialists. This agency also supports elite fellowships for students who pursue an interdisciplinary PhD or creatively bring the excitement of university science to K-12 classrooms. Locally, UT Austin's Environmental Science Institute was established with these same goals — to cultivate a more balanced approach to complex environmental problems in the areas of research, education, and public outreach.

These are great starts, but to guarantee success we must go the extra mile, addressing the underlying attitudinal and institutional barriers preventing achievement of genuine interdisciplinary education and engagement. It is time to construct novel degree programs — including a graduate training program in water studies — that are more than supplements and add-ons to existing curriculum and degree requirements.

New programs of this sort cannot be implemented and have little chance of succeeding without grassroots buy-in to the interdisciplinary philosophy by faculty members who drive university research and education — the best of whom are already over-committed within and tied to their own disciplines. Such buy-in can be fostered through changes in the institutional structure and reward system of the University — enabling and encouraging faculty and students to connect with each other across the brick and mortar departmental walls so typical of a university setting.

Interdisciplinary graduate training and public outreach require systemic changes capable of addressing our most challenging problems, including our water future and our energy future. What is the cost of addressing these problems? Perhaps the question should be recast. In pondering our next glass of water we might ask: What will be the cost of waiting until 2040 to deal with these problems?

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