8

Culture and Structure

Inside academia, it's hard to talk about the university's impact on the world's great problems without getting immersed in a conversation about faculty rewards and university structure. Discussions about enterprise creation or entrepreneurship in the university can quickly become debates over whether faculty should be rewarded with promotions and tenure for securing patents and creating businesses. Discussions of institutional innovation and how to attack big problems often bring up questions about how the university ought to be organized, whether the new program ought to report to a dean or the provost, or if the leader should be a center director or a department chair.

The time spent on these discussions, of course, is time not spent on solving critical problems. Actually addressing global warming is more important than determining who gets credit for it or whether to create a new unit to house the project. Creating the right culture and the right team with the expertise, resources, and passion to tackle a problem will have greater impact than arguing about developmental structures or the overhead allocation for a particular grant or contribution. In the abstract, academics usually agree that addressing critical problems is more important than debating organizational issues, but putting that belief into practice is sometimes difficult.

In this chapter, we discuss the difficulties involved in achieving consensus in universities. The passion and vigor that characterize debates over organizational issues grow

out of a sense of the importance of the institution and a sincere belief that the way it is organized affects how it carries out its mission. So while we might suggest that preparing to take on the great problems of the day could be done more efficiently with less debate over the fine details, we nevertheless value the love that faculty have for their disciplines and the passion they feel for their institutions.

Silos and Where They Come From

Universities are criticized, fairly, for being obsessed with organizational issues. Stories about the viciousness of academic infighting are legion, but we contend that turf protection and silo-driven thinking are no worse in universities than they are in other large institutions. Pharmaceutical companies produce drugs with toxicity problems because the division that discovers the drug is focused on potency and does not talk to the division that certifies safety. Investment banks separate wealth management from risk management, resulting in a process where more risk is taken with the client's money than with the assets of the bank. The disconnects resulting from silo-driven thinking are very much the same from enterprise to enterprise. The solution is to develop an outwardly focused perspective and constantly to ask the questions, precisely what problems are we trying to solve, and how do we do that better?

The silo mentality is legendary in higher education. Students in one school want to take classes in another school at the same university and cannot cross-register. Logical places for academic buildings are ruled out because housing or athletics has their eye on the same spot. And most important, the great problems requiring input from multiple disciplines are neglected because two deans or two development officers cannot agree on matters of control and credit.

So why is this silo mentality endemic to universities and, in fact, most large institutions? Roger Martin, dean of the Rotman School of Management at the University of Toronto, suggests an answer in his book *The Responsibility Virus*. He believes that a cycle of over- and under-responsibility gives rise to a compartmentalized organizational structure designed merely to perpetuate itself, as opposed to a culture that adapts itself to attack the problems it was created to solve. In this cycle, a leader becomes aware of problems in a particular unit, takes too much responsibility, and starts solving the problems alone. This process marginalizes the unit manager, leading to his dismissal and recruitment of a new manager. The leader has great confidence

in this new manager and takes that particular unit off the list of problem units, but of course none of the underlying problems that contributed to the poor performance of the previous manager have been addressed. When the problems resurface, the cycle repeats itself.

The underlying causes of the responsibility cycle have to do with intrusive leadership that opts for shuffling managers instead of addressing real problems. The cycle breeds managers more concerned about the well-being of their individual unit than the customer or task the unit was created to address.

Examples of this "responsibility virus" in universities are everywhere. The dean of a school will not collaborate on fundraising because he does not want to fall behind on his own campaign goal or lead the unit that has to lay off development officers. Faculty members want to withdraw from their department and form a new administrative unit because they feel the public service they perform or the interdisciplinary nature of their research is unappreciated by their colleagues. Deans do not enroll students in interdisciplinary programs because they cannot figure out how to share the tuition dollars among departments. These behaviors continue to take up an extraordinary amount of time, energy, and intellectual focus while the great problems universities should be addressing remain unsolved. Martin, himself a university administrator, acknowledged to us that the responsibility virus is endemic to universities, but he also believes that the extraordinary longevity of universities partially offsets the slow pace of change, creating the opportunity to produce transformations that will have impact over literally hundreds of years.

What Doesn't Work

Silo-driven thinking that impedes the making of important decisions permeates research universities and is inconsistent with solving big problems. Both of these points must be addressed when creating the university we envision. Before we suggest potential solutions, we want to discuss some approaches that will become increasingly difficult to implement and that seldom work.

CREATING PERMANENT INTERDISCIPLINARY STRUCTURES

An entrepreneurial faculty member has decided to address global warming. To do so, she needs to bring together colleagues—chemists, biologists, and physicists—who have the technical expertise to produce new energy sources. She also needs the participation of those

who have the ability to understand environmental impacts: marine scientists, climate specialists, and computer modelers. People who understand the policy implications—political scientists, policy studies faculty, sociologists, and even philosophers—are also needed. Rather than simply assemble the team, this entrepreneurial faculty member goes to the provost and proposes the creation of a new School of Climate Change. The provost protests that the administrative costs of the program will be high because a new dean, new development staff, and lab and office space are required. Department chairs oppose the idea, asserting that they will lose valuable colleagues and the academic luster that accompanies them. The dean of arts and sciences and his development officer are worried that new gifts for the study of climate change will not count in their arts and sciences fundraising totals or provide administrative fees. The dean also worries that students will begin to leave the college for the new school, taking their tuition dollars with them. The president doesn't want to create yet another silo.

But our enterprising young faculty member is not deterred. She gets a big oil company to provide a $50 million gift, creating the new School of Climate Change. The provost relents because there's now enough money to fund the new project and the attending costs for administrators and faculty. The president agrees because a high-visibility project has been funded on his watch, and the central development staff gets to count the big gift in its overall campaign total. The dean of arts and sciences agrees to be a team player. The School of Climate Change is formed. A high-profile dean for the new school is recruited to great fanfare, but the appointment triggers the need for more administrative infrastructure than the big gift provides. Years later, the $2.5 million in yearly expendable funds has generated a new vice provost and scores of new nonacademic employees, while the earth is still getting warmer.

REORGANIZING EXISTING UNITS

A new president comes to a university. In her initial listening tour she hears of growing frustration from all sides. She hears from students that higher education is outdated. Students are interested in solving the world's great problems but fail to see a correlation between the academic disciplines and their social concerns. As a result, many of the best students spend huge amounts of time and energy on causes they believe in at the expense of the classroom experience. Similarly, they often spend summers doing volunteer work as part of commercial overseas programs rather than participating in the university's

study abroad offerings because the academic component seems irrelevant.

Other members of the university community are also frustrated. The alumni hire recent graduates and conclude they cannot write, and for some reason the recent hires have not taken Introduction to Shakespeare, which alumni thought everyone "had to take." In this view, the great problems of society are the result of the erosion of traditional academic values, and the recent slippage in the *U.S. News* rankings would certainly be solved if everyone took Shakespeare. The faculty also expresses frustration. Humanists believe it is obvious that theory is where the action is; social scientists are stampeding to quantitative models; and the scientists are harshly divided between those who want to work on multidisciplinary problems and those who want to protect "the core."

The conversation escalates to the board of trustees. The president makes a bold announcement that she is appointing a blue-ribbon panel to study the future of higher education and examine the current organization of the university. There is much infighting and politicking over who is to serve on the panel. After a year, the panel produces a list of recommendations that involve the reorganization of the university into new units such as life sciences, humanistic theory, environment, and quantitative behavior. The new plan is implemented amid high-level fanfare, but the faculty and chairs in the traditional disciplines never buy into it because the changes do not reflect any fundamental change in the way teaching and research are undertaken. At the first hint of an economic downturn requiring university budget cuts, the traditionalists assert their point of view under the auspices of fiscal discipline, and the old organization again predominates.

CHANGING THE "REWARDS SYSTEM"

Discussions about the university's becoming more problem focused almost always end in a debate about how tenure and promotions are awarded. These debates come in two varieties. The first is over the language of the tenure regulations. In these debates, proponents argue for the explicit inclusion of some or all of the following as grounds for awarding tenure: technology creation in the form of patents or licenses, formation of start-up businesses, public and community service, creation of works of art, and advancement of the public understanding of science or research. These outcomes are all desired by various stakeholders, so proponents claim that if we "count" these things toward tenure or promotion, we will build a system that will

produce these outcomes. The problem is that changing the wording of the regulations has almost no impact on those who vote on a candidate. The granting of tenure is a subjective process, and the voters are tenured academics who are highly invested in the tradition that allowed them to achieve academic excellence. The faculty will take care to consider the regulations however they read, but ultimately neither their vote nor the tenure process in general will be changed by the addition of new criteria to a set of regulations. We strongly support a broader interpretation of faculty roles in universities, but we don't think simply changing regulations will produce the desired result.

The second debate relates to the first but is more fundamental; it concerns the criteria that should take precedence when making tenure and promotion decisions. This debate most often occurs when research productivity is pitted against great teaching, and research almost always wins. If the regulations are changed you can substitute company formation or social impact for teaching but the discussion remains the same, and, generally speaking, research will continue to win.

So how should these other important criteria get injected into the tenure discussion? One approach is to redefine what "counts" for research productivity in certain schools and include patents issued, companies founded, and public service, including impact on big problems, as part of the definition of tenurable scholarship. Jim Plummer, the dean of the engineering school at Stanford, says impact on big problems should be at least one criterion by which faculty research is measured, and Stanford engineering is not alone in this position.[1] Schools of engineering and applied sciences have considered this criterion in evaluating research productivity for years, and there is no reason why the concept of impact cannot be introduced in other disciplines to evaluate scholarly research. A comprehensive solution involves abandoning the zero-sum view for a broader definition of tenurable scholarship. If the culture in which tenure decisions are made is one that values scholarship that affects the world's biggest problems, criteria and processes will naturally evolve to reward research that ventures outside the purview of traditional scholarship.

The Fundamentals of a Different Approach: Culture Not Structure

We have explained why the conventional responses to the silo mentality are fundamentally flawed. They all rely on externally imposed solutions such as new organizational structures or regulations, and

the environment itself emphasizes collective over personal responsibility. The alternative is for universities to develop a culture that values problem solving over organizational self-interest and encourages personal responsibility by empowering and rewarding individual faculty and students. Changing the boxes on the organizational chart will not produce a university that is an engine of innovation. What follows are some suggestions that focus on the cultural change that will create such an institution.

CULTURAL CHANGE TAKES TIME

First, it is important to recognize that cultural change will not come without sustained effort from academic leadership. Presidents and provosts cannot put "make the university more problem focused" or "break down the silos" on their to-do lists and then hope to cross it off after the completion of a short-term initiative. Universities become more problem focused only with a sustained commitment and with broad buy-in from leaders throughout the campus. It does not happen overnight, but when it does, the results can be dramatic. In the ten interviews we did on the Stanford campus, the conversation invariably began with the statement that Stanford's mission was to address the world's biggest problems, a message that is consistently heard from the president's office. Equally important, virtually all of the collaborative programs we learned of at Stanford received early moral and financial support from the president's office. In short, with a consistent message over a significant period of time and strategic encouragement, cultural change can take place even in an institution as complex and diverse as a research university.

BEWARE OF THE QUICK FIX

Making leadership appointments almost always generates enthusiasm and optimism in organizations. Just as there is no quick way to address systemic challenges, it is unlikely that a single person has the ability to solve what university leaders have struggled with for 500 years. A president committed to a problem-solving culture needs help from the deans of the various schools, and those deans must be committed to the mission and have a mindset that values collaboration. Putting such people in place and retaining them is easier said than done. The CEO of an integrated bank told us he identifies future leaders for his business by assigning people to projects that require collaboration between operating divisions. If they succeed at producing solutions, they are candidates for advancement in the organiza-

tion. Similarly, President Faust of Harvard asked Professor Michael Porter to run a session at a dean's retreat that focused on the competitive advantage that "being part of Harvard University" gave to each member of the university. The idea was to build a collaborative mindset based on mutual self-interest. In making leadership appointments, universities must put more emphasis on this institutional mentality. Avoiding the quick-fix syndrome can best be accomplished by assembling search committees that embrace the kind of responsibility culture we discussed earlier.

University presidents cannot wait until a search committee has done its work and recommended two or three candidates before getting involved in the process. By then it is too late, especially when, as is often the case, one candidate has impressed the committee and become the only viable alternative. If a search committee is carefully chosen to reflect the values to which the institution aspires (this often involves including members who value inclusion and differing viewpoints and, where appropriate, knowledgeable and experienced alumni), it is more likely that its recommendations will include individuals who embrace the desired culture.

USE TASK FORCES SPARINGLY

Task forces are often a way to deflect pressure on a particular issue, but as a means of seeking community-wide consensus they are a great temptation for university leaders. When a difficult problem arises, it is easy to name a panel to examine it and produce recommendations. This provides a respite for six months or a year while the task force does its work, but the recommendations can be difficult or impossible to implement because those making the recommendations are not responsible for implementation. The end result is often another report that goes on the shelf with little follow-through. Meanwhile, months or years have elapsed while important problems remain unsolved. Task forces, while useful in building consensus or in sharing information, are unlikely to resolve difficult problems quickly or launch bold initiatives. The successful task forces are those that provide ideas and input but do not deflect responsibility from the institution.

FOCUS ON THE MISSION, NOT EXTERNAL RANKINGS

Universities will be ranked as long as producing lists sells magazines and draws readers to websites. In some ways, these rankings drive performance and, in the absence of other external measures, provide a way for trustees and system presidents to measure productivity. When

the rankings are high they generate extraordinarily favorable publicity for the university. For all of these reasons, external rankings cannot be ignored. Unfortunately, performance driven by external rankings can produce unintended consequences inconsistent with the institutional mission and conducive to a silo mentality. At our university, we would be at the top of a ranking that measures Rhodes scholarships won, women's soccer championships, and the scholarly productivity of the Sociology Department and the School of Public Health. Needless to say, we haven't found a ranking that is limited to these measures. And beyond that, most ranking formulas provide external measures that are unlikely to encourage a focus on the world's great challenges or even provide students the basic building blocks for living a productive life. Moreover, rankings can be easily manipulated, as evidenced by revelations that institutional programs have been put in place for the sole purpose of influencing the rankings.

The alternative to being driven by external rankings is to devise measures that are consistent with the university's mission and clearly measure the objectives of the institution. This allows the creation of a mindset that says, "Here's what we want to do," instead of, "Here's how we get ahead of Universities X, Y, and Z in the rankings." Considering three rather simple metrics will illustrate our point. The first is the total number of applications to undergraduate, graduate, and professional programs. If the number of applications is going up, then one could conclude that the institution's academic reputation is attractive and the fundamental culture is resonating with a relatively objective audience: prospective students and their parents. A second useful measure is the amount of funding for research grants. While this measure has the attendant problem of valuing some disciplines, such as the sciences, that naturally attract large amounts of external funding over others, such as English, that draw far fewer grant dollars, those differences are well appreciated by university leaders and trustees and can be considered in devising a measure. Finally, gift income relative to a national average or selected peer institutions is a reasonable indicator of the buy-in of a key constituency to the direction of the university and the culture that has been created. Some would argue that these measures give too much influence to the market and may not be appropriate for some institutions, but the trade-off is that these measures or others like them allow a university to set its own agenda rather than respond to externally created criteria that may not align with the mission of the institution.

STABILIZE INSTITUTIONAL LEADERSHIP

Today, the average tenure for university presidents and chancellors is seven years.[2] The average tenure for deans and provosts is much shorter. At our university, we have had six deans of arts and sciences in the last seven years. Turnover at the dean and provost levels is common at universities that have integrated liberal arts colleges: of the sixty-two largest research universities, thirty have integrated liberal arts colleges, and only five of those have deans that, as we write this, have served for more than three years.[3] The turnover doesn't occur because of some systemic problem. It occurs for two reasons. First, being dean of a liberal arts college is good preparation for being a chancellor or provost, and therefore these deans are the first to be called when an opening occurs at home or elsewhere. At our own institution, our last three permanent deans of arts and sciences all became provost or chancellor, and three of our last four provosts now lead major research universities. Second, there are more universities than there are potential administrators who have mastered the tasks necessary to run them. Understanding this unmet need for academic leadership experience is vital to fashioning a strategy for stability.

Universities that have stable presidencies generally prosper. Steve Sample of the University of Southern California, John Casteen of the University of Virginia, Mary Sue Coleman at the University of Michigan, and Graham Spanier at Penn State have all provided extended leadership to their universities and have outperformed their peers at other research universities by some measure. President Sample launched the second-most-successful fundraising campaign in the history of American higher education in USC's $3 billion effort and transformed the campus along multiple dimensions as a result.[4] President Coleman has made the University of Michigan one of the leading institutions for study abroad in the United States and has entered her university into the $100 million Michigan Innovation and Entrepreneurship Initiative. John Casteen, the longest-serving president at a top fifty school, has preserved UVA's esteem among educators despite heavy budget cuts from the Virginia legislature.[5] He accomplished this by decreasing the university's dependence on state funds, a controversial strategy that was executed adroitly. Graham Spanier has made his university an important part of the lives of many Pennsylvanians: Penn State is the most popular university among prospective students in the United States and received more than 100,000 applications for admission in 2008.[6] Stabilizing the president's position produces clear leadership and support for those on the leadership team, result-

ing in less turnover among deans, department heads, and other key administrators. Continuity in these positions breaks the cycle of task force reports and listening tours that inevitably accompanies new appointments.

We know from firsthand experience that achieving continuity is easier said than done. Not only are able administrators in great demand, but search committees guided by sophisticated headhunters often compete for the same individuals who meet criteria that are fashionable at the moment. The cycle can be broken by adopting a clear-eyed view of the administrative job market, again recognizing that there are lots of universities needing administrators. The best way to stabilize academic leadership is to identify candidates who understand the fact that from their first days as a dean they will get dozens of emails from search consultants saying that they are just the right person to go to another university and be a provost. It is therefore unrealistic to expect a long-term commitment from all key administrators. For provosts and deans, five years may be the most that can be expected; to get someone effective to stay longer is truly a special opportunity for a university. Henry Rosovsky's long tenure as dean of arts and sciences at Harvard is an example.

Fundamentally, our recommendations are twofold. First, hire individuals who understand the realities of academic leadership and the associated job market. Second, set realistic expectations for the tenure of key academic leadership and adjust accordingly. Able leaders will respond by infusing a bias for continuity throughout the institution and will ultimately recruit a senior team with both tangible objectives that will result in leadership continuity. Of course, continuity alone does not allow a university to achieve its potential, but it provides a platform upon which a culture of innovation can be built.

ENCOURAGE TEMPORARY COMBINATIONS AS AN ALTERNATIVE TO PERMANENT STRUCTURES

If culture is more important than structure in realizing the university we envision, then it should be easy to assemble problem-based, multidisciplinary teams to attack issues without encumbering the institution with a major long-term commitment every time such a team comes together. If administrative support, funding, and recognition can be achieved without creating something new and permanent or reorganizing some already existing department or school, energy can be directed to problem solving and away from turf protection. Problem-oriented teams could have five years to demonstrate their utility and

could generally be funded with expendable, one-time resources during that initial period. The assumption should be that most of such groupings will maximize their utility during that period and will sunset at the end of their initial period of inception. This is what happens to most start-up enterprises. A very few will survive the first five years and become candidates for more permanent status based upon the achievement of clearly articulated, measurable goals. In this second phase, which might reasonably be expected to span five years as well, the initiative would attempt to reach sustainability through whatever means made sense. Of course, this second phase will, in all probability, look very different from the first, but what exists will have stood the test of time and have a much higher likelihood of long-term success. For example, seed funding for Bio-X at Stanford was completely accomplished with one-time money. When we asked John Hennessy what would happen if Bio-X failed, he said, "Well, I would have a very nice building that I could do something else with."[7]

It is certainly easier for academic leaders to make a commitment to a project that is battle tested and has proven its viability as opposed to one that is merely a glimmer in the eye of a promising young faculty member—even if it has been converted into a spectacular PowerPoint presentation. The major advantage of this temporary approach is that it places time, energy, and focus on solving problems and relegates organizational structure, task forces, rules, and regulations to the back of the room at least in the initial stages of a new enterprise. At some point, such matters must be addressed, but only when new ideas have become true ongoing concerns, increasing the likelihood that the energy that must be expended will have a high payoff.

We have described here a different outlook on the structure of research universities that is based on our belief that the challenges are more about culture and people than structure, rules, and regulations. University presidents, deans, and provosts hear good ideas every day. Turning the right ideas into reality and empowering the people who create them requires sustained leadership and management qualities such as compassion and empathy. At bottom it requires leadership that will stay the course with a commitment to creating a culture that places solving big problems ahead of organizational structure, rules, and regulations. This is the priority that should never come off the to-do list, even in the face of seemingly more pressing challenges.