SCHOLARSHIP RECONSIDERED

PRIORITIES OF THE PROFESSORIATE

Ernest L. Boyer

The Carnegie Foundation for the Advancement of Teaching
CHAPTER 1

Scholarship over Time

Several years ago, while completing our study of undergraduate education, it became increasingly clear that one of the most crucial issues—the one that goes to the core of academic life—relates to the meaning of scholarship itself. In *College: The Undergraduate Experience in America*, we said, "Scholarship is not an esoteric appendage; it is at the heart of what the profession is all about..." and "to weaken faculty commitment for scholarship... is to undermine the undergraduate experience, regardless of the academic setting." The challenge, as we saw it, was to define the work of faculty in ways that enrich, rather than restrict, the quality of campus life.

Today, on campuses across the nation, there is a recognition that the faculty reward system does not match the full range of academic functions and that professors are often caught between competing obligations. In response, there is a lively and growing discussion about how faculty should, in fact, spend their time. Recently, Stanford University president Donald Kennedy called for more contact between faculty and students, especially in the junior and senior years, a time when career decisions are more likely to be made. "It is time," Kennedy said, "for us to reaffirm that education—that is, teaching in all its forms—is the primary task" of higher education.

Several years ago, the University of California completed a study of undergraduate education, recommending that more weight be placed on teaching in faculty tenure decisions. In the East, the University of Pennsylvania, in its faculty handbook, now states that "the teaching of students at all levels is to be distributed among faculty members without regard to rank or seniority as such." In the Midwest, Robert Gavin, president of Macalester College, recently reaf-
firmed his institution's view of the liberal arts mission as including not only academic quality, but also internationalism, diversity, and service.

I: is this issue—what it means to be a scholar—that is the central theme of our report. The time has come, we believe, to step back and reflect on the variety of functions academics are expected to perform. It's time to ask how priorities of the professoriate relate to the faculty reward system, as well as to the missions of America's higher learning institutions. Such an inquiry into the work of faculty is essential if students are to be well served, if the creativity of all faculty is to be fully tapped, and if the goals of every college and university are to be appropriately defined.

While we speak with pride about the great diversity of American higher education, the reality is that on many campuses standards of scholarship have become increasingly restrictive, and campus priorities frequently are more imitative than distinctive. In this climate, it seems appropriate to ask: How can each of the nation's colleges and universities define, with clarity, its own special purposes? Should expectations regarding faculty performance vary from one type of institution to another? Can we, in fact, have a higher education system in this country that includes multiple models of success?

Other issues within the academy must be candidly confronted. For example, the administrative structure has grown more and more complex, the disciplines have become increasingly divided, and academic departments frequently are disconnected from one another. The curriculum is fragmented, and the educational experience of students frequently lacks coherence. Many are now asking: How can the work of the nation's colleges and universities become more intellectually coherent? Is it possible for scholarship to be defined in ways that give more recognition to interpretative and integrative work?

According to the dominant view, to be a scholar is to be a researcher—and publication is the primary yardstick by which scholarly productivity is measured. At the same time, evidence abounds that many professors feel ambivalent about their roles. This conflict of academic functions demoralizes the professoriate, erodes the vitality of the institution, and cannot help but have a negative impact on students. Given these tensions, what is the balance to be struck between teaching and research? Should some members of the professoriate be thought of primarily as researchers, and others as teachers? And how can these various dimensions of faculty work be more appropriately evaluated and rewarded?

Beyond the campus, America's social and economic crises are growing—troubled schools, budget deficits, pollution, urban decay, and neglected children, to highlight problems that are most apparent. Other concerns such as acid rain, AIDS, dwindling energy supplies, and population shifts are truly global, transcending national boundaries. Given these realities, the conviction is growing that the vision of service that once so energized the nation's campuses must be given a new legitimacy. The challenge then is this: Can America's colleges and universities--with all the richness of their resources, be of greater service to the nation and the world? Can we define scholarship in ways that respond more adequately to the urgent new realities both within the academy and beyond?

Clearly, the educational and social issues now confronting the academy have changed profoundly since the first college was planted on this continent more than 350 years ago. Challenges on the campus and in society have grown, and there is a deepening conviction that the role of higher education, as well as the priorities of the professorate, must be redefined to reflect new realities.

Looking back, one can see that scholarship in American higher education has moved through three distinct, yet overlapping phases. The colonial college, with its strong British roots, took a view of collegiate life that focused on the student—on building character and preparing new generations for civic and religious leadership. One of the first goals the English settlers of Massachusetts pursued, said the author of a description of the founding of Harvard College in 1636, was to "advance Learning and perpetuate it to Posterity." Harvard College, patterned after Emmanuel College of Cambridge, England, was founded to provide a continuous supply of learned clergy for "the city on the hill" that the Massachusetts Puritans hoped would bring redemptive light to all mankind.
The colonial college was expected to educate and morally uplift the coming generation. Teaching was viewed as a vocation—a sacred calling—an act of dedication honored as fully as the ministry. Indeed, what society expected of faculty was largely dictated by the religious purposes of the colleges that employed them. Students were entrusted to tutors responsible for their intellectual, moral, and spiritual development. According to historian Theodore B. Baker, "professors were hired not for their scholarly ability or achievement but for their religious commitment. Scholarly achievement was not a high priority, either for professors or students."

This tradition, one that affirmed the centrality of teaching, persisted well into the nineteenth century. Young scholars continued to be the central focus of collegiate life, and faculty were employed with the understanding that they would be educational mentors, both in the classroom and beyond. In 1869, the image of the scholar as teacher was evoked by Charles W. Eliot, who, upon assuming the presidency of Harvard College, declared that "the prime business of American professors...must be regular and assiduous class teaching."

But change was in the wind. A new country was being formed and higher education’s focus began to shift from the shaping of young lives to the building of a nation. As historian Frederick Rudolph says of the new generation of educators: "All were touched by the American faith in tomorrow, in the unquestioning capacity of Americans to achieve a better world." It was in this climate that Rensselaer Polytechnic Institute in Troy, New York, one of the nation's first technical schools, was founded in 1824. RPI became, according to Rudolph, "a constant reminder that the United States needed railroad-builders, bridge-builders, builders of all kinds, and that the institute in Troy was prepared to create them even if the old institutions were not."

In 1846, Yale University authorized the creation of a professorship of "agricultural chemistry and animal and vegetable physiology." In the same decade, Harvard president Edward Everett stressed his institution’s role in the service of business and economic prosperity. The college took Everett’s message to heart. When historian Henry Adams asked his students why they had come to study at Cambridge, the answer he got was unambiguous: "The degree of Harvard College is worth money to me in Chicago."

The practical side of higher learning was remarkably enhanced by the Morrill Act of 1862, later called the Land Grant College Act. This historic piece of legislation gave federal land to each state, with proceeds from sale of the land to support both education in the liberal arts and training in the skills that ultimately would undergird the emerging agricultural and mechanical revolutions. The Hatch Act of 1887 added energy to the effort by providing federal funds to create university-sponsored agricultural experiment stations that brought learning to the farmer, and the idea of education as a democratic function to serve the common good was planted on the prairies.

Something of the excitement of this era was captured in Willa Cather’s description of her fellow students and her teachers at the University of Nebraska in the 1890s: "[They] came straight from the cornfields with only summer’s wages in their pockets, hung on through four years, shabby and underfed, and completed the course by really heroic self-sacrifice. Our instructors were oddly assorted: wandering pioneer school teachers, stranded ministers of the Gospel, a few enthusiastic young men just out of graduate school. There was an atmosphere of endeavor, of expectancy and bright hopefulness about the young college that had lifted its head from the prairie only a few years ago."

Thus, American higher education, once devoted primarily to the intellectual and moral development of students, added service as a mission, and both private and public universities took up the challenge. In 1903, David Starr Jordan, president of Stanford University, declared that the entire university movement in the twentieth century "is toward reality and practicality." By 1908, Harvard president Charles Eliot could claim: "At bottom most of the American institutions of higher education are filled with the modern democratic spirit of serviceableness. Teachers and students alike are profoundly moved by the desire to serve the democratic community,.... All the colleges boast of the serviceable men they have trained, and regard the serviceable patriot as their ideal product. This is a thoroughly democratic conception of their function."
Skeptics looked with amusement, even contempt, at what they considered the excesses of utility and accommodation. They long resisted the idea of making the university itself a more democratic institution and viewed with disdain Ezra Cornell’s soaring pledge in the 1860s to “...found an institution ‘where any person can find instruction in any study.’” Some critics even viewed the agricultural experiment stations as a betrayal of higher education’s mission. They ridiculed the “cow colleges,” seeing in them a dilution of academic standards. Others recoiled from the idea that non-elite young people were going on to college.

Still, a host of academics flocked to land-grant colleges, confident they had both the expertise and the obligation to contribute to building a nation. They embodied the spirit of Emerson, who years before had spoken of the scholarship of “action” as “the raw material out of which the intellect moulds her splendid products.” In this tradition, Governor Robert LaFollette forged, in Wisconsin, a powerful link between the campus and the state, one that became known nationally as the “Wisconsin Idea.” After visiting Madison in 1909, social critic Lincoln Steffens observed: “In Wisconsin the university is as close to the intelligent farmer as his pig-pen or his tool-house; the university laboratories are part of the alert manufacturer’s plant....”

The idea that professors could spread knowledge that would improve agriculture and manufacturing gave momentum to what later became known as applied research. In the 1870s and 1880s, many agreed that education was, above all, to be considered useful. In commenting on the link between the campus and applied agricultural research, historian Margaret Rossiter presented this vivid illustration: “The chief activities of a professor of agriculture... were to run field tests with various fertilizers and to maintain a model farm, preferably, but rarely, without financial loss.”

Over the next thirty years, these agricultural sciences developed at a rapid pace, vastly increasing the knowledge that scholars could apply.

Service during this expansive period had a moral meaning, too. The goal was not only to serve society, but to shape it. Andrew White, the first president of Cornell University, saw graduates “pouring into the legislatures, staffing the newspapers, and penetrating the municipal and county boards of America. Corruption would come to an end; pure American ideals would prosper until one day they governed the entire world.” Sociologist Edward Shils, in describing the spirit of the times, observed that “the concept of improvement was vague and comprehensive, signifying not only improvement of a practical sort but spiritual improvement as well.”

This ideal—the conviction that higher education had a moral mission to fulfill—was especially important to those who organized the American Economic Association in 1885, under the leadership of Richard Ely. Soon after joining the newly formed faculty at Johns Hopkins University, Ely wrote to the president, Daniel Coit Gilman, that the fledgling association would help in the diffusion of “a sound Christian political economy.” Most faculty were less zealous. Still, in this remarkable era marked by continued emphasis on liberal education and values, the faculty’s role was energized by determined efforts to apply knowledge to practical problems.

Basic research, a third dimension of scholarly activity which can be traced to the first years of the Republic, also began to take hold. The earliest research effort was largely led by investigators outside the academy—people such as Thomas Jefferson; the mathematician Nathaniel Bowditch; the pioneer botanists John and William Bartram; and the intrepid astronomer Maria Mitchell, who set up an observatory on lonely Nantucket Island and, on one October night in 1847, discovered a new comet. When President Jefferson sought a scientific leader for the first of the great western explorations, he did not go to the colleges, where science was not yet well developed. Instead, he looked within government and selected his personal secretary, Meriwether Lewis, who was known to have a keen eye for the natural world. Before the expedition, Lewis was sent to Philadelphia, where he received careful training in astronomy, botany, and mineralogy from members of the American Philosophical Society.

Still, colleges themselves were not wholly devoid of scientific effort. As early as 1738, John Winthrop of Harvard, the first academic scientist, had a laboratory in which to conduct experiments. He later persuaded the lawmakers in Massachusetts to sponsor America’s first
astronomical expedition. These early scientists traveled to Newfoundland in 1761 to observe the transit of Venus. Moreover, George Ticknor and Edward Everett, who attended a German university in 1815, are believed to have been the first Americans to go abroad to pursue advanced scholarly studies. Upon their return, they called, even then, for the introduction at Harvard of the German approach to scholarship.

Yet, change came slowly. The new sciences were very much on the edges of academic life and expectations were modest. As Dael Wolfe wrote: "Professors were hired to teach the science that was already known—to add to that knowledge was not expected..." Consider also that when Benjamin Silliman became the first chemistry professor at Yale in 1802, there were only twenty-one other full-time scientific faculty positions in the United States.

By the mid-nineteenth century, however, leading Atlantic seaboard colleges were giving more legitimacy to the authority of scientific effort and a few were beginning to transform themselves into research and graduate institutions. For example, Harvard's Lawrence Scientific School and Yale's Sheffield Scientific School were forerunners of the academy's deep commitment to the scholarship of science. Graduate courses in philosophy and the arts were established, and America's first Doctor of Philosophy was conferred at Yale in 1861. And the Massachusetts Institute of Technology, which opened its doors at the end of the Civil War, soon was recognized as a center of scientific investigation.

In the late nineteenth century, more Americans who, like Ticknor and Everett, had studied in Europe were profoundly influenced by the research orientation of the German university and wanted to develop a similar model here. G. Stanley Hall, first president of Clark University, wrote in 1891, "The German University is today the freest spot on earth... Nowhere has the passion to push on to the frontier of human knowledge been so general." Some, it is true, resisted the German influences. The prominent American humanist Irving Babbitt argued that the Ph.D. degree led to a loss of balance. He complained about the "maiming and mutilation of the mind that comes from over-

absorption in one subject," declaring that German doctoral dissertations gave him "a sort of intellectual nausea."

Still, research and graduate education increasingly formed the model for the modern university. Academics on both continents were moving inevitably from faith in authority to reliance on scientific rationality. And to men like Daniel Coit Gilman, this view of scholarship called for a new kind of university, one based on the conviction that knowledge was most attainable through research and experimentation. Acting on this conviction, Gilman founded Johns Hopkins University in 1876, a step described by Shils as "perhaps the single, most decisive event in the history of learning in the Western hemisphere."

In the 1870s, the universities of Pennsylvania, Harvard, Columbia, and Princeton, in that order, also began to offer programs leading to the Ph.D. degree, and the University of Chicago, founded in 1891, made the degree "the pinnacle of the academic program." By 1895 William Rainey Harper, president of this newly formed university, could require "each appointee to sign an agreement that his promotions in rank and salary would depend chiefly upon his research productivity."

By the late nineteenth century, the advancement of knowledge through research had taken firm root in American higher education, and colonial college values, which emphasized teaching undergraduates, began to lose ground to the new university that was emerging. Indeed, the founders of Johns Hopkins University considered restricting study on that campus to the graduate level only. In the end, some undergraduate education proved necessary, but the compromise was reluctantly made, and for many professors, class and lecture work became almost incidental. Service, too, was viewed as unimportant. Some even considered it a violation of the integrity of the university, since the prevailing Germanic model demanded that the professor view the everyday world from a distance.

It should be stressed, however, that throughout most of American higher education the emphasis on research and graduate education remained the exception rather than the rule. The principal mission at
most of the nation’s colleges and universities continued to be the education of undergraduates. And the land-grant colleges, especially, took pride in service.

But in the 1940s, as the Great Depression gave way to a devastating war, the stage was set for a dramatic transformation of academic life. At that historic moment, Vannevar Bush of M.I.T. and James Bryant Conant of Harvard volunteered the help of the universities in bringing victory to the nation. In 1940, Bush took the lead in establishing the National Defense Research Committee which, a year later, became the Office of Scientific Research and Development. Academics flocked to Washington to staff the new agencies and federal research grants began to flow. Universities and the nation had joined in common cause.

After the war, Vannevar Bush urged continuing federal support for research. In a 1945 report to the President entitled Science: The Endless Frontier, he declared: “Science, by itself, provides no panacea for individual, social, and economic ills. It can be effective in the national welfare only as a member of a team, whether the conditions be peace or war. But without scientific progress no amount of achievement in other directions can insure our health, prosperity, and security as a nation in the modern world.” The case could not have been more clearly stated. Higher learning and government had, through scientific collaboration, changed the course of history—and the impact on the academy would be both consequential and enduring.

Soon, a veritable army of freshly minted Ph.D.s fanned out to campuses across the country. Inspired by their mentors, this new generation of faculty found themselves committed not only to their institutions, but also to their professions. Young scholars sought to replicate the research climate they themselves had recently experienced. Academic priorities that had for years been the inspiration of the few now became the imperative of the many. In the new climate, discipline-based departments became the foundation of faculty allegiance, and being a “scholar” was now virtually synonymous with being an academic professional. Christopher Jencks and David Riesman, captutering the spirit of that period, declared that an academic revolution had taken place.

In 1958, Theodore Caplow and Reece McGee defined this new reality when they observed that while young faculty were hired as teachers, they were evaluated primarily as researchers. This shift in expectations is vividly revealed in two national surveys conducted by The Carnegie Foundation for the Advancement of Teaching. Twenty-one percent of the faculty surveyed in 1969 strongly agreed that it is difficult to achieve tenure without publishing. By 1989, the number had doubled, to 42 percent (table 1). The change at comprehensive colleges—from 6 percent to 43 percent—is especially noteworthy since these institutions have virtually no doctoral programs and only limited resources for research. Even at liberal arts colleges, where teaching has always been highly prized, nearly one in four faculty strongly agreed in 1989 that it is difficult to get tenure without publishing.

Meanwhile, the nation’s colleges and universities were experiencing another remarkable social transformation—the revolution of rising expectations. In 1947, Harry S Truman appointed a President’s Commission on Higher Education and almost overnight the mission of higher education in the nation was dramatically redefined. In its landmark report, this panel of prominent citizens concluded that America’s colleges and universities should no longer be “merely the instrument for producing an intellectual elite.” Rather, the report stated, higher education must become “the means by which every citizen, youth, and adult, is enabled and encouraged to carry his education, formal and informal, as far as his native capacities permit.”

In response to this expansive vision, the nation moved from an elite to a mass system of higher education, to use sociologist Martin Trow’s helpful formulation. New colleges were built, new faculty hired, and the G.I. Bill of Rights, first authorized in 1944, changed the entire tradition of who should go to college. Almost eight million former servicemen and women benefited from the legislation. In the years to come, younger brothers and sisters, and eventually sons and daughters, followed in the footsteps of the veterans. Higher education, once viewed as a privilege, was now accepted as a right.
Table 1
In My Department It Is Difficult for a Person to Achieve Tenure If He or She Does Not Publish (
Percentage Saying "Strongly Agree")

<table>
<thead>
<tr>
<th></th>
<th>1969</th>
<th>1989</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Respondents</td>
<td>21%</td>
<td>42%</td>
</tr>
<tr>
<td>Research</td>
<td>44%</td>
<td>83%</td>
</tr>
<tr>
<td>Doctorate-granting</td>
<td>27%</td>
<td>71%</td>
</tr>
<tr>
<td>Comprehensive</td>
<td>6%</td>
<td>43%</td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>6%</td>
<td>24%</td>
</tr>
<tr>
<td>Two-Year</td>
<td>3%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Please see Appendix C for a definition of institution classifications.

But even as the mission of American higher education was expanding, the standards used to measure academic prestige continued to be narrowed. Increasingly, professors were expected to conduct research and publish results. Promotion and tenure depended on such activity, and young professors seeking security and status found it more rewarding—in a quite literal sense—to deliver a paper at a national convention in New York or Chicago than teach undergraduates back home. Lip service still was being paid to maintaining a balance between collegiate responsibilities and university work, but on most campuses the latter had clearly won the day.

Research per se was not the problem. The problem was that the research mission, which was appropriate for some institutions, created a shadow over the entire higher learning enterprise—and the model of a "Berkeley" or an "Amherst" became the yardstick by which all institutions would be measured. Ernest Lynton, Commonwealth Professor at the University of Massachusetts, in commenting on the new priorities, concluded that developments after the Second World War "established too narrow a definition of scholarship and too limited a range of instruction."*2 Ironically, at the very time America's higher education institutions were becoming more open and inclusive, the culture of the professoriate was becoming more hierarchical and restrictive.

Thus, in just a few decades, priorities in American higher education were significantly realigned. The emphasis on undergraduate education, which throughout the years had drawn its inspiration from the colonial college tradition, was being overshadowed by the European university tradition, with its emphasis on graduate education and research. Specifically, at many of the nation's four-year institutions, the focus had moved from the student to the professoriate, from general to specialized education, and from loyalty to the campus to loyalty to the profession.

We conclude that for America's colleges and universities to remain vital a new vision of scholarship is required. What we are faced with, today, is the need to clarify campus missions and relate the work of the academy more directly to the realities of contemporary life. We need especially to ask how institutional diversity can be strengthened and how the rich array of faculty talent in our colleges and universities might be more effectively used and continuously renewed. We proceed with the conviction that if the nation's higher learning institutions are to meet today's urgent academic and social mandates, their missions must be carefully redefined and the meaning of scholarship creatively reconsidered.