## CHAPTER 1

## Scholarship over Time

N AUGUST 31, 1837, Ralph Waldo Emerson was called to Harvard College to address the ``president and gentlemen" of the Phi Beta Kappa Society. The subject of his oration was: ``The American Scholar." In that historic statement, described by Oliver Wendell Holmes as America's ``intellectual Declaration of Independence," Emerson discussed the need to break free of the dominance of ``the learning of other lands." He called for the rejection of a past that was ``alien and debilitating" and urged adoption of a new approach to scholarship, one that would be vital and selfconfident, in his words ``blood warm." The *American* scholar, Emerson argued, learned not only through books but from nature, and most especially from action.<sup>1</sup>

Scholarship, in Emerson's time, had a broader, more public meaning than today. As historians Alexandra Oleson and John Voss remind us, early American intellectual life was ``fostered and sustained by regionally isolated learned societies," and only gradually, during the decades after the Civil War, did scholarly activity become centered in the nation's higher learning institutions.<sup>2</sup> In the early days of the republic, scholars could be found in almost every walk of life—clergymen, merchants, teachers, even students—anyone seriously engaged in creative, reflective thought. But the danger, as Emerson saw it, was that such learning could all too easily become isolated and trivial. He insisted that scholarship draw on the realities of life as well as books, and that ``thinking" be the goal.

It is this same issue—what it means to be a scholar—that, once again, must be carefully considered. The time has come, we believe, to step back and reflect on the variety of functions today's academics are expected to perform and to ask how such activity relates to the faculty reward system as well as to the full range of higher learning institutions. We have built, in this country, a large and diverse network of colleges and universities, and by almost any standard higher learning can be judged a huge success. Still, the educational and social issues confronting the academy today have changed

profoundly since Emerson spoke in the Harvard College chapel more than a century and a half ago, and there is a growing conviction that both the role of higher education and the priorities of the professoriate should be redefined to reflect the new realities, both on the campus and in society at large.

The first concern relates to campus goals. While we speak with pride about the great diversity of American higher education, the reality is that, in recent years, standards of scholarship have become increasingly restrictive and the priorities of many institutions 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?

There are other concerns within the academy that also must be candidly confronted. For example, the disciplines have become divided and academic departments are disconnected from one another. The curriculum is fragmented and the educational experience of many students lacks coherence. In such a climate, 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?

Further, professors, on many campuses—if they are to gain security and status—are expected regularly to conduct research and communicate results to colleagues. Promotion and tenure often depend on these activities. But faculty also are to teach, advise students, and many feel torn between these competing obligations. 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 teachers? And how can these various dimensions of faculty work be more appropriately evaluated and rewarded?

Challenges confronting higher learning reach beyond the campus, too. America's social and economic crises—troubled schools, budget deficits, pollution, urban decay and neglected children—to highlight problems that are most apparent. Other problems 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, 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, in the days ahead, define scholarship in ways that respond more adequately to the urgent new realities both within the academy and beyond?

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 of character and preparing new generation for civic and religious leadership. One of the first goals the English settlers of Massachusetts pursued, in the words of a 1643 proclamation, was to ``advance learning and perpetuate it to Posterity."<sup>3</sup> Harvard College, patterned after Emmanuel College of Cambridge, England, was founded to provide the new colony with 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 Bennett, teachers ``were hired not for their academic ability 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."<sup>s</sup>

But change was in the wind. A new country was being formed and the focus of higher learning began to shift from shaping young lives to building a nation. As historian Frederick Rudolf says of the new generation of educators: "All were touched by the American faith in tomorrow, in the unquestionable capacity of Americans to achieve a better world." It was in this climate that Rensselaer Polytechnic Institute, one of the nation's first

technical schools, was founded in 1824. RPI became, according to Rudolf, "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."<sup>7</sup>

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."<sup>8</sup>

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, 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 public *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."<sup>10</sup>

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."<sup>11</sup> 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.<sup>12</sup>

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 material out of which the intellect molds her splendid products."<sup>13</sup> 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."<sup>14</sup> After visiting Madison in 1909, 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...."<sup>13</sup>

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."<sup>16</sup> 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 *reshape* 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."<sup>17</sup> 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."<sup>18</sup>

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."<sup>19</sup> Most faculty were less zealous. Still, in this remarkably active era, the faculty's role was energized by determined efforts to apply knowledge to practical problems, a vision that also stressed liberal education and placed considerable emphasis on values.

Meanwhile-with the ascending of science-a third dimension of scholarly activity was taking hold and the inspiration for this new dimension of academic life could be traced to the first years of the Republic when intellectuals and inventors were lured by the excitement and curiosity of disciplined investigation. Much of this early effort was led by investigators outside the academy-people like 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.<sup>20</sup> Consider also that 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.<sup>21</sup>

Although the effort was restricted, colleges themselves were not 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.<sup>22</sup> 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.<sup>20</sup>

Yet, change came slowly. The new sciences were very much on the edges of academic life and expectations were modest. As one authority put it: "Professors of that era 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 even helping 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 Ph.D. was conferred at Yale in 1861.<sup>25</sup> 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, Americans who had studied in Europe were profoundly influenced by the research orientation of the German university and they wanted to clone the model here.<sup>26</sup> 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 to the frontier of human knowledge been so general."<sup>27</sup> 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 to the mind that comes from over-absorption in one subject, declaring that German doctoral dissertations gave him "a sort of intellectual nausea."<sup>28</sup>

Still, graduate education and research increasingly was 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 new 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 that has been described as "perhaps the single, most decisive event in the history of learning in the Western hemisphere."<sup>29</sup>

In the 1870s, the universities of Pennsylvania, Harvard, Columbia, and Princeton, in that order, also began to offer programs leading to the Doctor of Philosophy degree,<sup>30</sup> and the University of Chicago, founded in 1891, made the degree ``the pinnacle of the academic program."<sup>31</sup> By 1895 William Rainey Harper, president of this newly formed university, could proclaim that ``the crowning function of a university is original research. It is not enough that instructors should merely do the class and lecture work assigned to them. [Their] first obligation is that of research and investigation."<sup>32</sup>

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 were on a collision course with the new university that was emerging.<sup>33</sup> Indeed, the founders of Johns Hopkins University considered restricting study on that campus institution 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 on the education of undergraduates. And the land-grant colleges, especially, still 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."<sup>35</sup> 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, and Christopher Jencks and David Riesman, capturing the spirit of that period, declared that an *academic revolution* had taken place.\*

Theodore Caplow and Reece McGee defined this new reality when they observed, in 1958, that while young faculty were hired as *teachers*, they were evaluated primarily as *researchers*.<sup>37</sup> This shift in expectations is vividly revealed in two surveys conducted by The Carnegie Foundation for the Advancement of Teaching. In 1969, about one-fifth, 21 percent, of the faculty surveyed 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, one in four faculty strongly agreed, in 1989, that it is difficult to get tenure without publishing.\*

## Table 1

## In My Department It Is Difficult for a Person to Achieve Tenure If He or She Does Not Publish

(Percentage So	tying ``Strong	ly Agree")
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	1969	1989
All Respondents	21%	42%
Research	44	83
Doctorate-Granting	27	71
Comprehensive	6	43
Liberal Arts	6	24
Two-Year	3	4

\*Please see Appendix ? for a definition of institution classifications.

SOURCE: The Carnegie Foundation for the Advancement of Teaching, 1969 National Survey of Faculty and 1989 National Survey of Faculty.

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."39 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."40

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.<sup>41</sup> 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 benefitted from the legislation. In the years to come, younger brothers and sisters, and essentially sons and daughters, followed in the footsteps of the veterans. And higher education, once viewed as a privilege, was now accepted as a right.

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 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. Thus, at the very time higher education's student policies were becoming more open and inclusive, the culture of the professoriate was becoming more hierarchical and restrictive. 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."<sup>42</sup>

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 almost wholly 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 is the need to clarify campus missions and relate the work of the academy more directly to the realities of contemporary life, just as Emerson sought to connect scholarship to the needs of an emerging nation. 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* more effectively be used and be more continuously renewed. We proceed with the conviction that if the nation's higher education institutions are to meet today's urgent academic

and social mandates, their public and professional obligations must be carefully redefined and the meaning of scholarship creatively reconsidered.