
ENLARGING THE PERSPECTIVE

Since colonial times, the American professoriate has responded to mandates both from within the academy and beyond. First came teaching, then service, and finally, the challenge of research. In more recent years, faculty have been asked to blend these three traditions, but despite this idealized expectation, a wide gap now exists between the myth and the reality of academic life. Almost all colleges pay lip service to the trilogy of teaching, research, and service, but when it comes to making judgments about professional performance, the three rarely are assigned equal merit.

Today, when we speak of being “scholarly,” it usually means having academic rank in a college or university and being engaged in research and publication. But we should remind ourselves just how recently the word “research” actually entered the vocabulary of higher education. The term was first used in England in the 1870s by reformers who wished to make Cambridge and Oxford “not only a place of teaching, but a place of learning,” and it was later introduced to American higher education in 1906 by Daniel Coit Gilman.¹ But scholarship in earlier times referred to a variety of creative work carried on in a variety of places, and its integrity was measured by the ability to think, communicate, and learn.

What we now have is a more restricted view of scholarship, one that limits it to a hierarchy of functions. Basic research has come to be viewed as the first and most essential form of scholarly activity, with other functions flowing from it. Scholars are academics who conduct research, publish, and then perhaps convey their knowledge to students or apply what they have learned. The latter functions grow *out of* scholarship; they are not to be considered a part of it. But knowledge is not necessarily developed in such a linear manner. The arrow of causality can, and frequently does, point in *both* directions. Theory surely leads to practice. But practice also leads to theory. And teaching, at its best, shapes both research and practice. Viewed from this perspective, a more comprehensive, more dynamic understanding of scholarship can be considered, one in which the rigid categories of teaching, research, and service are broadened and more flexibly defined.

There is a readiness, we believe, to rethink what it means to be a scholar. Richard I. Miller, professor of higher education at Ohio University, recently surveyed academic vice presidents and deans at more than eight hundred colleges and universities to get their opinion about faculty functions. These administrators were asked if they thought it would be a good idea to view scholarship as more than research. The responses were overwhelmingly supportive of this proposition.² The need to reconsider scholarship surely goes beyond opinion polls, but campus debates, news stories, and the themes of national conventions suggest that administrative leaders are rethinking the definitions of academic life. Moreover, faculty, themselves, appear to be increasingly dissatisfied with conflicting priorities on the campus.

How then should we proceed? Is it possible to define the work of faculty in ways that reflect more realistically the full range of academic and civic mandates? We believe the time has come to move beyond the tired old “teaching versus research” debate and give the familiar and honorable term “scholarship” a broader, more capacious meaning, one that brings legitimacy to the full scope of academic work. Surely, scholarship means engaging in original research. But the work of the scholar also means stepping back from one’s investigation, looking for connections, building bridges between theory and practice, and communicating one’s knowledge effectively to students. Specifically, we conclude that the work of the professoriate might be thought of as having four separate, yet overlapping, functions. These are the scholarship of *discovery*, the scholarship of *integration*, the scholarship of *application*, and the scholarship of *teaching*.

The Scholarship of Discovery

The first and most familiar element in our model, the *scholarship of discovery*, comes closest to what is meant when academics speak of “research.” No tenets in the academy are held in higher regard than the commitment to knowledge for its own sake, to freedom of inquiry, and to following, in a disciplined fashion, an investigation wherever it may lead. Research is central to the work of higher learning, but our study here, which inquires into the meaning of scholarship, is rooted in the conviction that disciplined, investigative efforts within the academy should be strengthened, not diminished.

The *scholarship of discovery*, at its best, contributes not only to the stock of human knowledge but also to the intellectual climate of a college or university. Not just the outcomes, but the process, and especially the passion, give meaning to the effort. The advancement of knowledge can generate an almost palpable excitement in the life of an educational institution. As William Bowen, former president of Princeton University, said, scholarly research “reflects our pressing, irrepressible need as human beings to confront the unknown and to seek understanding for its own sake. It is tied inextricably to the freedom to think freshly, to see propositions of every kind in ever-changing light. And it celebrates the special exhilaration that comes from a new idea.”³

The list of distinguished researchers who have added luster to the nation’s intellectual life would surely include heroic figures of earlier days—Yale chemist Benjamin Silliman, Harvard naturalist Louis Agassiz, astronomer William Cranch Bond, and Columbia anthropologist Franz Boas. It would also include giants of our time—James Watson, who helped unlock the genetic code; political philosopher Hannah Arendt; anthropologist Ruth Benedict; historian John Hope Franklin; geneticist Barbara McClintock; and Noam Chomsky, who transformed the field of linguistics; among others.

When the research records of higher learning are compared, the United States is the pacesetter. If we take as our measure of accomplishment the number of Nobel Prizes awarded since 1945, United States scientists received 56 percent of the awards in physics, 42 percent in chemistry, and 60 percent in medicine.⁴ Prior to the outbreak of the Second World War, American scientists, including those who fled Hitler’s Europe, had received only 18 of the 129 prizes in these three areas. With

regard to physics, for example, a recent report by the National Research Council states: “Before World War II, physics was essentially a European activity, but by the war’s end, the center of physics had moved to the United States.”⁵ The council goes on to review the advances in fields ranging from elementary particle physics to cosmology.

The research contribution of universities is particularly evident in medicine. Investigations in the late nineteenth century on bacteria and viruses paid off in the 1930s with the development of immunizations for diphtheria, tetanus, lobar pneumonia, and other bacterial infections. On the basis of painstaking research, a taxonomy of infectious diseases has emerged, making possible streptomycin and other antibiotics. In commenting on these breakthroughs, physician and medical writer Lewis Thomas observes: “It was basic science of a very high order, storing up a great mass of interesting knowledge for its own sake, creating, so to speak, a bank of information, ready for drawing on when the time for intelligent use arrived.”⁶

Thus, the probing mind of the researcher is an incalculably vital asset to the academy and the world. Scholarly investigation, in all the disciplines, is at the very heart of academic life, and the pursuit of knowledge must be assiduously cultivated and defended. The intellectual excitement fueled by this quest enlivens faculty and invigorates higher learning institutions, and in our complicated, vulnerable world, the discovery of new knowledge is absolutely crucial.

The Scholarship of Integration

In proposing the *scholarship of integration*, we underscore the need for scholars who give meaning to isolated facts, putting them in perspective. By integration, we mean making connections across the disciplines, placing the specialties in larger context, illuminating data in a revealing way, often educating nonspecialists, too. In calling for a scholarship of integration, we do not suggest returning to the “gentleman scholar” of an earlier time, nor do we have in mind the dilettante. Rather, what we mean is serious, disciplined work that seeks to interpret, draw together, and bring new insight to bear on original research.

This more integrated view of knowledge was expressed eloquently by Mark Van Doren nearly thirty years ago when he wrote: “The connectedness of things is what the educator contemplates to the limit of his capacity.

No human capacity is great enough to permit a vision of the world as simple, but if the educator does not aim at the vision no one else will, and the consequences are dire when no one does.”⁷ It is through “connectedness” that research ultimately is made authentic.

The scholarship of integration is, of course, closely related to discovery. It involves, first, doing research at the boundaries where fields converge, and it reveals itself in what philosopher-physicist Michael Polanyi calls “overlapping [academic] neighborhoods.”⁸ Such work is, in fact, increasingly important as traditional disciplinary categories prove confining, forcing new topologies of knowledge. Many of today’s professors understand this. When we asked faculty to respond to the statement, “Multidisciplinary work is soft and should not be considered scholarship,” only 8 percent agreed, 17 percent were neutral, while a striking 75 percent disagreed (table 1). This pattern of opinion, with only slight variation, was true for professors in all disciplines and across all types of institutions.

The scholarship of integration also means interpretation, fitting one’s own research—or the research of others—into larger intellectual patterns. Such efforts are increasingly essential since specialization, without broader perspective, risks pedantry. The distinction we are drawing here between “discovery” and “integration” can be best understood, perhaps, by the questions posed. Those engaged in discovery ask, “What is to be known, what is yet to be found?” Those engaged in integration ask, “What do the findings mean? Is it possible to interpret what’s been discovered in ways that provide a larger, more comprehensive understanding?” Questions such as

TABLE 1. MULTIDISCIPLINARY WORK IS SOFT AND SHOULD NOT BE CONSIDERED SCHOLARSHIP

	Agree	Neutral	Disagree
All respondents	8%	17%	75%
Research	7	9	84
Doctorate-granting	6	13	80
Comprehensive	8	14	78
Liberal arts	8	16	77
Two-year	9	27	63

Source: The Carnegie Foundation for the Advancement of Teaching, 1989 National Survey of Faculty.

these call for the power of critical analysis and interpretation. They have a legitimacy of their own and if carefully pursued can lead the scholar from information to knowledge and even, perhaps, to wisdom.

Today, more than at any time in recent memory, researchers feel the need to move beyond traditional disciplinary boundaries, communicate with colleagues in other fields, and discover patterns that connect. Anthropologist Clifford Geertz, of the Institute for Advanced Study in Princeton, has gone so far as to describe these shifts as a fundamental “refiguration, . . . a phenomenon general enough and distinctive enough to suggest that what we are seeing is not just another redrawing of the cultural map—the moving of a few disputed borders, the marking of some more picturesque mountain lakes—but an alteration of the principles of mapping. Something is happening,” Geertz says, “to the way we think about the way we think.”⁹

This is reflected, he observes, in

philosophical inquiries looking like literary criticism (think of Stanley Cavell on Beckett or Thoreau, Sartre on Flaubert), scientific discussions looking like *belles lettres morceaux* (Lewis Thomas, Loren Eisley), baroque fantasies presented as deadpan empirical observations (Borges, Barthelme), histories that consist of equations and tables or law court testimony (Fogel and Engerman, Le Roi Ladurie), documentaries that read like true confessions (Mailer), parables posing as ethnographies (Castaneda), theoretical treatises set out as travelogues (Levi-Strauss), ideological arguments cast as historiographical inquiries (Edward Said), epistemological studies constructed like political tracts (Paul Feyerabend), methodological polemics got up as personal memoirs (James Watson).¹⁰

These examples illustrate a variety of scholarly *trends*—*interdisciplinary*, *interpretive*, *integrative*. But we present them here as evidence that an intellectual sea change may be occurring, one that is perhaps as momentous as the nineteenth-century shift in the hierarchy of knowledge, when philosophy gave way more firmly to science. Today, interdisciplinary *and* integrative studies, long on the edges of academic life, are moving toward the center, responding both to new intellectual questions and to pressing human problems. As the boundaries of human knowledge are being dramatically reshaped, the academy surely must give increased attention to the *scholarship of integration*.

The Scholarship of Application

The first two kinds of scholarship—discovery and integration of knowledge—reflect the investigative and synthesizing traditions of academic life. The third element, the *application* of knowledge, moves toward engagement as the scholar asks, “How can knowledge be responsibly applied to consequential problems? How can it be helpful to individuals as well as institutions?” And further, “Can social problems *themselves* define an agenda for scholarly investigation?”

Reflecting the *Zeitgeist* of the nineteenth and early twentieth centuries, not only the land-grant colleges but also institutions such as Rensselaer Polytechnic Institute and the University of Chicago were founded on the principle that higher education must serve the interests of the larger community. In 1906, an editor celebrating the leadership of William Rainey Harper at the new University of Chicago defined what he believed to be the essential character of the American scholar. Scholarship, he observed, was regarded by the British as “a means and measure of self-development,” by the Germans as “an end in itself,” but by Americans as “equipment for service.”¹¹ Self-serving though it may have been, this analysis had more than a grain of truth.

Given this tradition, one is struck by the gap between values in the academy and the needs of the larger world. Service is routinely praised, but accorded little attention—even in programs where it is most appropriate. Christopher Jencks and David Riesman, for example, have pointed out that when free-standing professional schools affiliated with universities, they lessened their commitment to applied work even though the original purpose of such schools was to connect theory and practice. Professional schools, they concluded, have oddly enough fostered “a more academic and less practical view of what their students need to know.”¹²

Colleges and universities have recently rejected service as serious scholarship, partly because its meaning is so vague and often disconnected from serious intellectual work. As used today, service in the academy covers an almost endless number of campus activities—sitting on committees, advising student clubs, or performing departmental chores. The definition blurs still more as activities beyond the campus are included—participation in town councils, youth clubs, and the like. It is not unusual for almost any worthy project to be dumped into the amorphous category called “service.”

Clearly, a sharp distinction must be drawn between *citizenship* activities and projects that relate to scholarship itself. To be sure, there are meritorious social and civic functions to be performed, and faculty should be appropriately recognized for such work. But all too frequently, service means not doing scholarship but doing good. To be considered *scholarship*, service activities must be tied directly to one's special field of knowledge and relate to, and flow directly out of, this professional activity. Such service is serious, demanding work, requiring the rigor—and the accountability—traditionally associated with research activities.

The *scholarship of application*, as we define it here, is not a one-way street. Indeed, the term itself may be misleading if it suggests that knowledge is first “discovered” and then “applied.” The process we have in mind is far more dynamic. New intellectual understandings can arise out of the very act of application—whether in medical diagnosis, serving clients in psychotherapy, shaping public policy, creating an architectural design, or working with the public schools. In activities such as these, theory and practice vitally interact, and one renews the other.

Such a view of scholarly service—one that both applies and contributes to human knowledge is particularly needed in a world in which huge, almost intractable problems call for the skills and insights only the academy can provide. As Oscar Handlin observed, our troubled planet “can no longer afford the luxury of pursuits confined to an ivory tower. . . . [S]cholarship has to prove its worth not on its own terms but by service to the nation and the world.”¹³

The Scholarship of Teaching

Finally, we come to the *scholarship of teaching*. The work of the professor becomes consequential only as it is understood by others. Yet, today, teaching is often viewed as a routine function, tacked on, something almost anyone can do. When defined as *scholarship*, however, teaching both educates and entices future scholars. Indeed, as Aristotle said, “Teaching is the highest form of understanding.”

As a *scholarly* enterprise, teaching begins with what the teacher knows. Those who teach must, above all, be well informed, and steeped in the knowledge of their fields. Teaching can be well regarded only as professors are widely read and intellectually engaged. One reason legislators, trustees, and the general public often fail to understand why ten or twelve hours in the classroom each week can be a heavy load is their

lack of awareness of the hard work and the serious study that undergirds good teaching.

Teaching is also a dynamic endeavor involving all the analogies, metaphors, and images that build bridges between the teacher's understanding and the student's learning. Pedagogical procedures must be carefully planned, continuously examined, and relate directly to the subject taught. Educator Parker Palmer strikes precisely the right note when he says knowing and learning are communal acts.¹⁴ With this vision, great teachers create a common ground of intellectual commitment. They stimulate active, not passive, learning and encourage students to be critical, creative thinkers, with the capacity to go on learning after their college days are over.

Further, good teaching means that faculty, as scholars, are also learners. All too often, teachers transmit information that students are expected to memorize and then, perhaps, recall. While well-prepared lectures surely have a place, teaching, at its best, means not only *transmitting* knowledge, but *transforming* and *extending* it as well. Through reading, through classroom discussion, and surely through comments and questions posed by students, professors themselves will be pushed in creative new directions.

In the end, inspired teaching keeps the flame of scholarship alive. Almost all successful academics give credit to creative teachers—those mentors who defined their work so compellingly that it became, for them, a lifetime challenge. Without the teaching function, the continuity of knowledge will be broken and the store of human knowledge dangerously diminished.

Physicist Robert Oppenheimer, in a lecture at the two-hundredth anniversary of Columbia University in 1954, spoke elegantly of the teacher as mentor and placed teaching at the very heart of the scholarly endeavor: "The specialization of science is an inevitable accompaniment of progress; yet it is full of dangers, and it is cruelly wasteful, since so much that is beautiful and enlightening is cut off from most of the world. Thus it is proper to the role of the scientist that he not merely find the truth and communicate it to his fellows, but that he teach, that he try to bring the most honest and most intelligible account of new knowledge to all who will try to learn."¹⁵

Here, then, is our conclusion. What we urgently need today is a more inclusive view of what it means to be a scholar—a recognition that knowledge is acquired through research, through synthesis, through practice, and through teaching.¹⁶ We acknowledge that these four

categories—the scholarship of discovery, of integration, of application, and of teaching—divide intellectual functions that are tied inseparably to each other. Still, there is value, we believe, in analyzing the various kinds of academic work, while also acknowledging that they dynamically interact, forming an interdependent whole. Such a vision of scholarship, one that recognizes the great diversity of talent within the professoriate, also may prove especially useful to faculty as they reflect on the meaning and direction of their professional lives.

EBSCOhost®

THE FACULTY

A Mosaic of Talent

The richness of faculty talent should be celebrated, not restricted. Only as the distinctiveness of each professor is affirmed will the potential of scholarship be fully realized. Surely, American higher education is imaginative and creative enough to support and reward not only those scholars uniquely gifted in research but also those who excel in the integration and application of knowledge, as well as those especially adept in the scholarship of teaching. Such a mosaic of talent, if acknowledged, would bring renewed vitality to higher learning and the nation.

While affirming the diversity of faculty functions, we wish also to underscore the point that some dimensions of scholarship are universal—mandates that apply to all.

First, all faculty should establish their credentials as *researchers*. Whether or not they choose specialized, investigative work on an ongoing basis, every scholar must, we believe, demonstrate the capacity to do original research, study a serious intellectual problem, and present to colleagues the results. Indeed, this is what the dissertation, or a comparable piece of creative work, is all about.

Second, all members of the faculty should, throughout their professional careers, stay in touch with developments in their fields and remain professionally alive. But we also underscore the point that this might be accomplished in different ways. As things now stand, “staying in touch”