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Faculty and Scholarship

The Need for Change

The traditional functions of American universities—teaching, research, and service—have become too hierarchical, with research receiving the highest priority. In order to achieve a better balance among these functions, universities of the twenty-first century should consider four strategies: 1) organizing the institution to be more compatible with interdisciplinary research, 2) broadening the definition of scholarship, 3) recognizing that faculty change over time, and 4) revising the method and practice of faculty evaluation. In so doing, faculty are more likely to have greater flexibility in their careers and sustain their vitality for their entire professional lives.

The university is one of the longest surviving institutions of society, and a central reason for this longevity is its capacity for change. Throughout history, universities have experienced the full continuum of change, on occasion showing a willingness to make slight adjustments, while at other times boldly making major changes. Pressures for both kinds of changes have come from inside and outside the academy. As American universities prepare for the turn of another century, it is timely to consider the changes that are needed to ensure their continued value to society.

The Modern American University

In the last half of the nineteenth century, American universities emerged as an amalgam of the English "Oxbridge" tradition, the German research influence, and the American penchant for utilitarianism. As a result, American universities were the first to exist for the threefold purpose of teaching, research, and service. Today, the best American universities have achieved worldwide preeminence, and as a subset of all higher education institutions, they are unrivaled for their quality, diversity, and access.

One of the most important features of American universities is academic specialization, a characteristic that found expression in the creation of disciplinary departments and that has given both form and substance to the university ideal. Academic departments quickly became key organizational units within universities; their development provided a locus for disciplinary scholarship and nurtured in faculty a fierce loyalty and devotion to their disciplines.

Academic specialization has contributed significantly to the success of the academy, and it will continue to in the future. However, there have been negative consequences associated with specialization as well, including placing an inordinate value on traditional research and narrowing the definition of what constitutes research. These problems have tended to diminish the role of teaching and service.

Others who have examined the current status of higher education notice a similar imbalance. In a recent issue of *Educational Record,* Alexander W. Astin makes a useful distinction between an institution's explicit values and its implicit values. Explicit values find expression in university mission statements and institutional charters, almost all of which attach equal weight to teaching, research, and service. Implicit values, on the other hand, are the motives that actually drive institutional policies. Most people in research universities, he writes, subscribe to their institutions' implicit value system, which includes teaching, research, and service, with research receiving the most emphasis by far.

Astin maintains that several problems arise when there is a significant imbalance between an institution's explicit and implicit values. The implications for faculty are obvious. Research is important, but teaching less so. And disciplinary research is far more critical than interdisciplinary or multidisciplinary research. Ironically, the incredible success of the modern American university has led to devaluing teaching, especially undergraduate teaching, and to imposing a limiting definition of research. Both trends must be reversed in the universities of the future.

Reversing the Trends

Although we believe that all universities would benefit from placing a greater emphasis on teaching and by encouraging more interdisciplinary and multidisciplinary scholarship, certain types of institutions are ideally suited for implementing these changes. Land-grant universities and comprehensive urban universities in particular have a special obligation to serve their states, their regions, and the nation through direct programs, research, and other forms of scholarship and by preparing new generations of students to understand, appreciate, and solve today's problems.

The traditional mission of land-grant universities—teaching, research, and service—gives these institutions a mandate for implementing the changes discussed in this article. Many modern metropolitan universities also have a strong identity with their community, as well as a national focus. By reclaiming teaching as a

central activity and expanding the boundaries of scholarship and service, these universities would be acting within the scope of their institutional charters. They would, in effect, be restoring a needed balance to the traditional functions of American universities.

In order to achieve better balance among teaching, research, and service, universities of the twenty-first century must consider a variety of approaches and strategies. We suggest four in particular: organizational change to create greater compatibility with interdisciplinary research, broadening the definition of scholarship, recognizing that faculty careers change over time, and revising the method and practice of faculty evaluation.

Organizational Change

Universities will engage in more interdisciplinary and multidisciplinary research in the future. This assumption rests on the fact that the issues and problems we face as a nation and a world are far more difficult and complex than they have ever been. In addition, the stakes are getting progressively higher. Terms and phenomena such as AIDS, biotechnology, the greenhouse effect, deforestation, and global economics are becoming commonplace. And what they all share in common is a level of complexity that is best understood and addressed through interdisciplinary inquiry.

A good example of interdisciplinary work in the area of medical technology is provided by the magnetic resonance imaging machines now found in most research hospitals. These machines are the direct result of investigations in quantum mechanics and computer science. While these fields developed independently for many years, they finally came together in the 1970s to better serve the needs of medical research.

Universities can do far more to bring disciplines together, and one structural approach designed to accomplish this is the establishment of interdisciplinary centers. While this is not a new idea, it is still one that is not easily realized on many campuses. Campus politics, resistance to change, and other local factors can conspire to make the creation of interdisciplinary centers difficult. Nonetheless, these types of structures will become as important to the universities of the future as disciplinary departments were to institutions in the past.

The University of New Hampshire, for example, established an Institute for the Study of Earth, Oceans, and Space five years ago. It was founded on the basis of scientific study that reveals that the earth functions as a global system—sun, atmosphere, oceans, fresh water, ice cores, and continents all interact to maintain a delicate yet dynamic balance. Faculty research in the institute

reflects the fields of study that will be more prominent in coming decades, fields such as space science, biogeochemistry, glaciology, and paleo-meteorology, to name a few. To work effectively on the problems posed by global change, the knowledge and expertise of faculty from a variety of disciplines are required.

Similar examples can be found at other universities. Centers and institutes in humanities, business, social sciences, and health sciences are becoming more common, and they will continue to grow in number and influence.

A residual benefit of establishing interdisciplinary centers is the visibility that they can give to complex issues. These issues become more real to students, and students are more likely to grasp the importance of developing skills that come from interdisciplinary study, i.e., the integration and synthesis of information. These skills will only increase in importance and will serve students who strive to be active participants in our society.

Academic leaders must do more to encourage and reward interdisciplinary scholarship. They should provide needed incentives and resources and work with faculty to expand opportunities for interdisciplinary effort.

Broadening the Definition of Scholarship

The university is an institution committed to scholarship, including learning and discovering new things, integrating ideas in a different and perhaps novel fashion, and exploring old themes in new ways. The scholar communicates this learning and understanding in a variety of ways—by teaching students in the classroom; writing in journals, books and the popular press; and helping others apply what is known in factories, farms, and forests. Such a broad conception of the work of the scholar is necessary because of the many ways in which scholarship is manifest in universities.

Accordingly, we propose that the modern university adopt a single mission—scholarship. Scholarship is both knowledge acquisition and communication. The one cannot exist without the other. Scholarship can include several diverse forms of knowledge acquisition; in their work in progress, R. Eugene Rice and Ernest Boyer are examining a related framework for ways of knowing:

- Scholarship is understanding. More particularly, scholarship is the understanding of a particular body of knowledge, a basic expectation for all faculty. To be a scholar is to be an expert.
- Scholarship is the search for new knowledge. Traditional academic research focuses on the new idea and represents what most academics consider scholarship. Although this approach has been

highly successful in the modern American university for all disciplines, the exclusive focus on this form of scholarship has led to a degree of trivialization.

- Scholarship is the integration of knowledge. Almost every field and discipline now has a journal devoted to work on the integration of existing knowledge. In addition, one of the most important forms of scholarly communication among peers involves symposia, workshops, and other meetings dedicated to the integration of information on some phenomenon. With the proliferation of new knowledge, this form of scholarship is becoming ever more important.
- Scholarship is both product and performance in the visual, performing, and creative arts. Universities provide an environment to permit creative scholars to write, perform, or paint. Their scholarship is meant to test the intellectual future as surely as the results of laboratory experimentation.
- Scholarship is problem solving. The application of current knowledge to a real-world problem, whether in traditional agriculture, modern business, or technology, is a form of scholarship that enlightens those who use it. As the scholar applies knowledge, new learning often occurs that enhances future applications.

If scholarship is so diverse, what then is teaching? Teaching represents many forms of expressing scholarship and is a necessary part of the activity of the university scholar. The communication of scholarship is central to its existence. If scholarship is not communicated in some form, it has no value. There is no teaching process apart from research, nor from the application of that knowledge. As Robert J. Oppenheimer observed, the role of the scholar is not complete until he or she teaches.

Scholarship is expressed through all forms of teaching, as much as it is through writing. Such teaching may be intended for a fairly limited group of highly focused scholars in a particular area of study; to undergraduate students directly or through an effective textbook; or, even more generally, to a lay public through a magazine article. All these varieties of teaching can be based on very sophisticated scholarship.

Likewise, consulting, which results in the transfer of technology or information, can represent a significant form of intellectual activity based on scholarship. One would not expect modern scholars to transmit old techniques or outdated information, but rather to utilize the most modern understandings of their field, be it organizational culture, control of pests, or the technology of modern materials.

Both teaching and consulting are valid forms of the expression of scholarship. They are each equally valid, and together with

scholarship itself, they represent the range of the intellectual activity of the modern university.

How does this discussion of scholarship help us to understand the problems of the modern university? The problem is that universities have come to focus almost exclusively on published work for peers in fairly narrow fields, as if it were the highest form of scholarship. Indeed, sometimes it appears that this is the only definition of scholarship allowable.

This call, then, is for a different approach to assessment, which may include different individual career patterns. Universities must develop a broader definition of scholarship that can contribute to the quality of institutions, while providing the best scholarship and development opportunities.

Faculty Careers

The faculty form the core of the university enterprise. They are the source of energy and stability in university programs and represent a long-term commitment and institutional investment. It is not uncommon for a faculty member to serve in one of our institutions for three or even four decades, and since in the course of a faculty member's career, many new issues can be expected to arise that cannot be predicted at the beginning of it, we must create an environment for our faculty where flexibility is the norm and where scholarship in new areas is as valued and encouraged as continuing scholarship in old ones.

The traditional model of the academic profession is derived from the most successful national research universities, and the fit with most academic careers at other academic institutions is awkward. Faculty careers are conceptualized as generally linear, following a single specialized research area, wherever it leads. However, we know that faculty members often go through a number of different phases in their careers:

- The enthusiasm of a new faculty member just emerging from graduate school may be tempered through experience, resulting in new perspectives on his or her discipline.
- Priorities for scholarship may change—at one time for teaching graduate seminars and pursuing a single line of research, at other times for more direct public service, exploring new scholarly areas, or teaching more undergraduate courses.
- New discoveries or new perspectives in the discipline may require new scholarship and necessitate changes in service programs and in undergraduate teaching.

To realize the best return on their investment in their faculties by sustaining faculty vitality over the long run, institutions must actively encourage flexibility within academic careers. To achieve the greatest levels of faculty productivity and responsiveness necessary to address the emerging problems of society, it may be necessary to invest university resources in faculty in new ways and to eliminate or alter some university practices that tend to inhibit flexibility in faculty careers.

Faculty learning styles. David A. Kolb has developed a scheme for describing the learning styles of different people, which may help us to understand the changes which occur in faculty careers. Learning style preferences develop as a result of experience, and people in widely different disciplines typically exhibit different preferred modes of thinking and learning. For example, many engineers are individuals who prefer to deal with abstract concepts and apply them to real world problems. On the other hand, people in humanities disciplines often prefer learning opportunities that permit them to reflect and form conclusions based upon individual concrete experiences. According to Kolb, it is a normal part of human development for learning style preferences to change as people mature and for individuals to want to seek different types of intellectual challenges.

A period of specialization emphasizing a particular learning style typically extends through formal education and into the early years of a professional career. Specialization is succeeded in midcareer by a stage of integration in which the individual begins to undertake activities that use ways of knowing other than those characteristic of his or her early professional life. Because faculty come to seek integration and undergo changes in preferred learning styles over time, anticipating that these changes will occur may make it possible to more effectively maintain faculty vitality over an entire career.

Faculty career stages. Certain types of dilemmas are characteristic, even if not universal, of faculty members at various career stages. The following characterizations may apply to faculty at various career stages at the land-grant and comprehensive metropolitan universities:

- All faculty probably struggle with defining what it means to be professional at their institutions. Because the professional model taken from the national research universities is not completely satisfactory, lacking as it does a broader conceptualization of scholarship that includes teaching and service—tensions between the expectations of the university and of the profession commonly arise.

- New untenured faculty may in some ways experience the greatest professional tension between disciplinary and university expectations. Since they are at the pinnacle of their formal professional training, they may also be the most specialized of all the university faculty in terms of preferred learning style. Although very good at their disciplinary specialty, their degree of specialization may make it relatively difficult for them to teach beginning undergraduates, and they may not understand or value the service commitments of the university.
- Midcareer faculty who seek integration in their professional activities may experience serious institutional resistance. When the opportunity to explore a new line of scholarship is desired for the second sabbatical, for example, departmental colleagues and university standards may require that the individual continue to pursue a line of research that is the same as, or very closely related to, what has been done in the past.
- Senior faculty, if they have not been previously encouraged to seek new sources of intellectual stimulation, may simply withdraw from earlier professional disciplinary activities without engaging new ones.

There is an alternate professional model or viewpoint for faculty members that is probably more appropriate for those who work at land-grant and comprehensive metropolitan universities. It takes into account the many sources of vitality and satisfaction experienced by successful faculty members at these institutions. It acknowledges that academic careers may be linear, as in traditional research universities, but it also explicitly recognizes that careers may be much more diversified and that faculty members may express their scholarly proclivities in a variety of worthwhile ways. From an administrative viewpoint, the important question is how to encourage the desired diversity of expressions of scholarship while at the same time maintaining high standards of quality in all areas.

Faculty Assessment and Career Growth

If we are going to encourage faculty to grow intellectually in a variety of directions, we need to look critically at the way faculty are evaluated. Current evaluation procedures are almost exclusively the prerogative of the department and discipline and often are biased by undervaluing information about anything but the quantity and quality of scholarly publication in the discipline. If we are to view scholarship as the core of the university enterprise and if we are to maintain high standards for that scholarship in all of its manifestations, we need to develop evaluation procedures to mirror our expectations. Suggested changes in evaluation procedures are outlined for consideration.

First, we need to adopt a flexible set of criteria against which to evaluate faculty members. Although it may be completely appropriate for some faculty at certain points in their careers to be evaluated against the most rigorous publication standards of their own discipline, at other times it may not be. Faculty who seek to emphasize teaching or service should also be evaluated stringently, but against other appropriate evaluation criteria.

Second, to avoid chaos and encourage planning, individual faculty decisions to move in a particular direction or to emphasize one aspect of scholarship rather than another need to be negotiated and agreed upon in advance with the department and the institution. Individual growth contracts, approved at the departmental and institutional level, have been successful at a few institutions in creating an atmosphere for diversification and deserve to be used more. For some faculty, an agreement to use an interdisciplinary evaluation process may be appropriate. Periodic individual evaluations that have a developmental rather than simply summative objective are appropriate and can be helpful for tenured as well as untenured faculty.

Third, we need to seek institutional ways to make excellence in all aspects of scholarship visible to the university and to the larger public community. For example, annual awards might be given by each college of the university to honor faculty who exemplify excellence in the scholarly areas of research, teaching, and service. Special awards could also be given for significant interdisciplinary work. An annual series of invited public events might also effectively highlight faculty who exemplify the new spirit and mission of the university.

Fourth, presidents, provosts, and deans should take frequent opportunities to articulate and affirm the underlying scholarly mission of the university in all of its manifestations. Tangible evidence of their commitment to this vision of the metropolitan university could take the form of supporting professional development centers for faculty. These centers would serve to encourage excellent teaching and research, as well as various entrepreneurial and service activities. Establishment of various centers for interdisciplinary and applied scholarship would serve to demonstrate the universities' priorities in these areas.

Implicit in the preceding paragraphs is the view that faculty need to be seen as individuals, and treated accordingly. As we move away from the national research university standard for evaluating all faculty at the land-grant and comprehensive metropolitan universities, so ought we also move away from the unrealistic 'super-faculty' model, which asserts that all faculty should always

be excellent in, and by implication be able to devote unlimited time to, research, service, and teaching.

Not all techniques for promoting sustained faculty vitality and career growth will be effective for all faculty. Insofar as assessment is concerned, the evaluation process ought to be seen as the process of constructing an individual evaluation template for each faculty member and measuring his or her accomplishments against it. While some techniques for assisting faculty might be most appropriate for certain groups, such as mentoring for junior faculty or curricular and teaching workshops for midcareer and senior professors, it is important not to stereotype even these groups.

We need to develop and keep a long-term perspective on the professional lives of our faculty members. While affirming that scholarship is the glue that holds the university together, we need to encourage faculty members to diversify and grow intellectually in their own ways, share their experiences with one another, and recognize that everyone experiences changes in intellectual interests and motivation over time. To enhance all of the scholarly functions of the university and to respond effectively to the challenges that the twenty-first century will surely bring, we must find institutional ways to permit faculty more flexibility in their careers, to assist in sustaining their professional vitality, and to ensure that they are not locked into the same narrow pattern of scholarship for their entire professional lives.

Suggested Readings

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