# Research, Teaching, and Service 

Why Shouldn't Women's Work Count?

## Introduction

Despite myths concerning the efficacy of affirmative action programs, there are still relatively few women in academia. Moreover, the female professors one does encounter in the academy are apt to be found in lower-paying, less prestigious, and less secure positions [6, 12, 18, 71, 83]. Educational cutbacks combined with fewer tenure-track positions and more restrictive criteria for tenure and promotion have given rise to a "revolving door" phenomenon, wherein adjunct and junior faculty are rotated through entry level positions without serious consideration for tenure [42, 44]. This has created a new class of "gypsy scholars"[14], an intellectual "proletariat"[87] who - in order to eke out a living - move from one low-paying, dead-end teaching post to another. This proletariat is disproportionately female.

There are several explanations for this. Some people claim that women are simply not socialized to be as career-oriented or ambitious as men. Others point to the fact that women still are largely responsible for child-rearing and housekeeping, thus giving them less time and energy to forge successful career paths. Though there undoubtedly is some truth to such explanations, focusing exclusively on such external

[^0]factors may lead us to overlook the ways in which sexism is embedded in the structures, norms, and policies of the university itself.

Organizational theorists have recently begun to grapple with the ways in which allegedly sex-neutral corporations and bureaucracies are dominated by masculine principles and structures which lead to advantages for male employees and disadvantages for female employees [1, $16,45,46]$. Central to this analysis has been the uncovering of a gendered division of labor in corporations, which arises through the institutionalization of organizational roles that "carry characteristic images of the kinds of people that should occupy them" [46, p. 250]. Thus, certain tasks, such as managing money, may be gender-typed as masculine, whereas other tasks, such as dealing with clients, may be gendertyped as feminine, replicating the gender stereotypes that exist outside the corporation. Such gender-typing of (abstract) jobs subsequently leads to filling these occupational positions with specific persons who are biologically male or female [1]. This further reinforces the initial assumption that certain work is "men's work," whereas other work is "women's work" [45]. "Men's work" is, moreover, typically depicted as involving greater complexity and difficulty than "women's work" and thus enjoys greater status and rewards than "women's work" [1]. Hence, the gender-role segregation results in a gender-role hierarchy in which the jobs identified as (culturally) feminine and allocated to (biological) women are undervalued and underpaid

This article examines one way institutionalized sexism operates in the university setting by examining the gender roles and gender hierarchies implicit in (allegedly gender-neutral) university tenure and promotion policies. Current working assumptions regarding (1) what constitutes good research, teaching, and service and (2) the relative importance of each of these endeavors reflect and perpetuate masculine values and practices, thus preventing the professional advancement of female faculty both individually and collectively. A gendered division of labor exists within (as outside) the contemporary academy wherein research is implicitly deemed "men's work" and is explicitly valued, whereas teaching and service are characterized as "women's work" and explicitly devalued.

## The Prevailing Criteria for Tenure and Promotion

There are three criteria by which candidates for tenure and promotion are judged: research, teaching, and service; however, these criteria are not equally weighted. Though all faculty are expected to do some
service, few (if any) faculty members have ever been denied tenure on the basis of insufficient service [47]. And though all faculty are expected to do some teaching, outstanding teaching will not by itself guarantee someone tenure. The decisive factor in tenure and promotion (and salary) decisions is research $[14,15,18,25,26,34,47,54,84]$.

Research is decisive in two ways. First, research is necessary for successful promotion: if a candidate's research is deemed inadequate, no amount of teaching or service will compensate for this. Lewis cites the following example of evaluative reasoning regarding a candidate for full professor: "Her performance as a teacher and as someone who has rendered university service has been outstanding. Regrettably, her scholarship although of high quality when it has appeared has been quite limited. I sincerely believe that her record viewed without respect to such questions as affirmative action, etc. would not lead to the conclusion that she be promoted" [54, pp. 98-99]. Second, research may be sufficient for successful promotion: excellent research will counterbalance almost all other deficiencies in a faculty member's record, except complete "dereliction of duty" [47]. In the words of one untenured faculty member: "To achieve tenure . . . one need not have any service, and need only demonstrate minimal competence as a teacher; . . . research is the only consideration for tenure that actually seems to count" [25, p. 137]. Only when a faculty member's research is borderline (adequate, but not outstanding), will her or his teaching or service record become a central focus of the review proceedings. According to both statistical analyses and personal interviews, this emphasis on research in tenure and promotion reviews holds across all disciplines and all types of institutions, except two-year colleges [15, 18, 34].

The relative importance attributed to research, teaching, and service is reflected also in the ranking of activities within each of these categories of evaluation. For example, within the category of research, publishing is deemed a more noteworthy activity than presenting papers at conferences (akin to lecturing) or editing or reviewing for a journal (akin to grading). And within the category of publishing, publishing articles in scholarly journals (for other researchers) is considered more important than publishing textbooks (for students), and both of these activities carry far more weight than publishing essays in the popular media (for the general populace) - an activity typically deemed utterly insignificant for the purposes of tenure and promotion review. Finally, within the category of publishing scholarly works, publishing purely theoretical articles often ranks above publishing articles which "merely" apply theory to a problem and, typically, both of these rank above publishing
educationally oriented articles [17]. Thus, one finds the pattern of prioritizing research over teaching and service replicated within the relative rankings of subspecies of research itself. The more "pure" the scholarship is (in form, content, and intended audience), the more value that research is accorded. To the degree that scholarship is "tainted" by its affiliation with teaching or service-related activities, it is devalued [6].

Similar considerations pertain to the rankings of subspecies of teaching and service activities, respectively. The more closely a teaching activity is related to research the more highly it will be valued, and the more closely a teaching activity is related to service the less likely it will be valued. Thus, for example, teaching graduate courses carries more status than teaching undergraduate courses; and both of these are ranked above administering an academic program or advising and counseling students.

Likewise, although service, in general, carries little weight in faculty evaluations, certain types of service - such as being an officer or chair of a national professional organization (an organization that sponsors a research journal and/or academic conferences) - may be noteworthy. Certainly, such professional service is typically deemed more noteworthy than university service, which, in turn, is deemed more noteworthy than community service. Service to one's campus, though expected, is considered relatively unimportant in the review process. The only exception to this may be holding an administrative post - especially if such a post is related to issues of teaching (for example, the dean of graduate studies) or, better yet, research (for example, the vice-president in charge of research). Such administrative activities will carry far more weight than membership on university committees, which, in turn, will be accorded greater significance than, for example, advising student organizations. Finally, service to one's civic community, while morally admirable, is unlikely to be considered a professional virtue when the time for promotion comes. This is so even when such public service is intimately related to one's professional expertise. In summary form the rank ordering of criteria for faculty evaluation is roughly as displayed in Table 1.

The emphasis on research publication in the contemporary academy is a primary cause of stress for faculty - especially for female faculty [84]. Yet, the general consensus within and across universities concerning the rank ordering of the faculty activities listed above implies that current institutional policies regarding tenure and promotion policies are fair and easily justified. But this is simply not the case.

Below, various rationales for the reigning faculty evaluation and reward system are examined. Unless propped up by a set of unexamined

TABLE 1
Criteria for Tenure and Promotion

| Research | Teaching | Service |
| :--- | :--- | :---: |
| Publishing <br> professional journals <br> professional books <br> theoretical <br> applied <br> pedagogical |  |  |
| Publishing <br> textbooks <br> instructional materials |  |  |
| Conference presentations | Classroom performance <br> graduate |  |
| undergraduate |  |  |
| upper division |  |  |
| lower division |  |  |$\quad$|  |
| :---: |
|  |
| Editing/reviewing for a journal |

presuppositions regarding the justification of a gender-role hierarchy, each of these putative justifications fails.

Research Separates the Men from the Boys . . . and the Women
Why should research be the primary criterion for tenure and promotion? One line of argument, which focuses on research as an indicator of faculty merit, goes something like this: "Research separates the men from the boys (or the women from the girls). Teaching and service won't serve this function because everyone teaches and does committee work." ${ }^{1}$ A variation on this theme argues that "Teaching and service won't serve this function because there is no satisfactory way of evaluating teaching and service." According to the first line of reasoning, research performance is the only factor that differentiates faculty presumed to be equal in other respects. According to the second line of reasoning, research performance is the only factor by which faculty members can be objectively evaluated, even if they are unequal in other respects.

## "Everyone Teaches and Serves"

Is research the only factor that will demonstrate faculty merit? Though it is true that everyone teaches and serves on committees, this
line of reasoning overlooks the following facts. First, not everyone teaches the same number of courses. Course loads vary among universities, departments and even within departments. Those engaged in research are often given course reductions and/or sabbatical leaves. Secondly, not everyone teaches the same number of students. Even where course loads are similar, class sizes may be vastly different. Those who teach core courses will service many more students than those who teach specialty courses; and those who teach undergraduates will have much larger classes than those who teach graduate students. Finally, professors vary in the amount of effort they expend per course and per student. Some faculty members frequently develop new courses and assignments or redesign old ones, while others teach from the same notes year in and year out. Some faculty members assign essays, while others evaluate students by computer-graded multiple choice examinations. Some faculty members have grading assistants, others do not. Some spend hours writing detailed comments on each student essay, while others just skim and grade. Some faculty members spend hours advising and mentoring students, while others are unapproachable or unavailable even during their scheduled office hours.

Similarly, though it is true that everyone is given committee assignments, not everyone serves on the same number of committees and not everyone spends the same number of hours on committee work. Some committees meet weekly, and others meet once or twice a year. Some committee members prepare for meetings and spend time outside the meeting doing homework, seriously examining the issues, lobbying for proposals and so forth, while other committee members rarely show up for scheduled meetings.

Simply to say that "everyone teaches" obscures crucial differences among courses and among teachers. Likewise, to say that "everyone serves" obscures important differences among committees and among their respective members. In doing so, the argument for prioritizing research both exploits and obscures the gender bias in university tenure and promotion policy.

In treating teaching and service as undifferentiated activities, the argument for prioritizing research utilizes a technique commonly used to devalue women's work and, thus, rationalize the unpaid or underpaid status of that work. It assumes that there is no difference between good and bad teaching (and service) or, that if there is, this difference is unaccounted for by levels of skill, because these are activities that are instinctual or natural for those who perform them. Consider, for example, Stigler's claim that "there are, nationally, many more good teachers of undergraduates than there are good researchers"[77, p. 74]. This makes little sense if teaching is a learned skill in light of the fact that graduate
students receive little or no pedagogical training but a considerable amount of research training [11]. The notion that anyone can teach well, like the notion that anyone can parent (or more specifically mother) well, assumes that these activities are uncreative, unchallenging, and unskilled. Similarly, the notion that anyone can perform service activities well, like the notion that anyone can be a good housekeeper or waitress, assumes that such activities are unskilled and require little thought or effort. As Smith argues, this is an assumption that could only arise from a specific perspective, namely the (masculine) perspective of those who do not routinely or seriously engage in such labor [76].

Teaching duties have fallen and continue to fall disproportionately to women [ $6,818,19,42,60,71,83,90]$. In 1980, 53 percent of male faculty at four-year institutions, but only 35 percent of female faculty, taught eight or fewer hours per week. Conversely 28 percent of female faculty, but only 15 percent of male faculty taught thirteen or more hours per week. [42]. Eleven percent of female faculty, compared to 7.5 percent of male faculty, spent seventeen or more hours per week teaching [8]. In the late 1980s, the gender gap had narrowed slightly, but female faculty were still significantly more likely than male faculty to spend the bulk of their time on teaching and teaching-related activities. In 1988 faculty women were spending, on average, 61 percent of their time teaching, whereas faculty men spent only 54 percent of their time teaching [83, p. 152]. In 1989-90, 43 percent of all male faculty, but only 36 percent of female faculty, taught eight or fewer hours per week. Conversely, 27 percent of female faculty, compared to 20 percent of male faculty, taught thirteen or more hours per week. Eleven percent of female faculty, compared to 8 percent of male faculty, spent seventeen or more hours per week in the classroom [6].

In addition to spending more hours per week in the classroom, women spend more time preparing for their classes and more time advising students than do their male colleagues [6]. This may be related to the fact that women are more likely to be assigned undergraduate and remedial classes. In 1989, 58 percent of women, but only 48 percent of men, were teaching undergraduates exclusively [19]. Twenty percent of women, but only 13 percent of men, taught remedial skills classes [6]. Yet, even among those faculty teaching undergraduates exclusively, women spend more time preparing for teaching than do their male colleagues [19].

Such disparity in teaching responsibilities is not surprising given that female faculty members are largely concentrated in ranks, disciplines, and institutions that have higher than average teaching expectations. In 1989 women comprised 45 percent of instructors, 38 percent of assis-
tant professors, 26 percent of associate professors and and 13.7 percent of all full professors. ${ }^{2}$ Almost half of female faculty were concentrated in health-related fields, education, English, and the social sciences. ${ }^{3}$ Finally, women accounted for 38 percent of all full-time community college faculty, 28 percent of private four-year college faculty, 21 percent of public research university faculty, 27 percent of other public university faculty and only 19 percent of private research university faculty $[1$, p. 33 ; see also $6,18,62,83]$. Within the twenty most prestigious research universities, women held only 17 percent of full-time faculty positions in 1986, with a descending proportion of higher-ranked positions: 32 percent of assistant professorships, 22 percent of associate professorships, and 8 percent of full professorships [62, p. 232] Thus, women - including both white and minority women - are apt to find themselves in places and stations with fewer resources and heavier teaching loads than their male counterparts $[3,6,90]$.

Moreover, one might speculate that due to disciplinary specializations combined with low rank, female faculty will carry disproportionately heavy grading and advising loads for each of the classes they teach. For example, instructors and assistant professors in English may be assigned lower-division composition courses which necessitate the frequent grading of essays and consultations with each individual student. And junior faculty in nursing, social work, or education may spend numerous hours organizing and supervising student internships. In all disciplines, faculty occupying lower ranks are apt to find themselves teaching sections of introductory or general education courses with large numbers of students, many of whom are young and in need of personal as well as intellectual guidance.

In light of the above considerations, it is not surprising to find out that tenure and promotion processes are a primary source of stress for female faculty. In its 1989 National Survey of Faculty, the Carnegie Foundation discovered that 74 percent of female faculty believed, contrary to the prevailing paradigm, that "teaching effectiveness should be the primary criterion for promotion of faculty" [18, p. 64].

Like teaching activities, service activities differ along gender lines. In addition to spending more time advising students, female faculty members engage in significantly more, and different types of, service activities than their male counterparts [3]. In 1988 the U.S. Department of Education found that female faculty, across all types of institutions, devoted a greater percentage of their time to institutional service activities than did male faculty [83, p. 153]. In 1990 the Carnegie Foundation concurred that female faculty were the most active participants in the daily campus governance process, "even though they devoted more
time to the teaching function than did men, they were significantly more active in the work of the faculty senate, administrative advisory committees, and other campus-wide bodies"[19, p. 42]. Faculty women are also more likely than men to volunteer time and expertise to ex-tra-institutional projects [83, p. 151].

There are several reasons for these differences. First, female and minority faculty members - and especially minority female faculty may have more "opportunities" for serving student groups and community organizations, as well as individual students, because they are sought out by other women or minority members as positive role models or because of their areas of research interest [60, 71]. Second, faculty women (unlike men of color) are more likely to be approached by students with personal, as well as academic, concerns on the expectation that women will be more caring and sensitive than men [75]. Third, women, as well as men of color, are given more "opportunities" for university service than white men. For example, they may be asked to serve on various committees in order to guarantee representation of their group or simply to symbolize their institution's commitment to affirmative action and diversity goals [35, 43, 60, 63, 71]. Finally, women (unlike men of color) are thought "to enjoy and to excel in the 'pattern maintenance' chores that governance involves" [60, p. 131, see also 75, 82]. Yet, neither this belief nor tokenism extend to the more prestigious, more powerful, and better paying administrative positions.

Women still have limited opportunities to formulate university policies as presidents, vice-presidents, academic deans, and department chairs. Tenured female faculty, especially faculty women of color, are often overlooked for high-visibility and high-status administrative posts, while frequently steered toward "dead-end special" positions, such as director of minority affairs or affirmative action officer - "positions that usually have no advancement track in the academic structure" [71 p. 192; see also 5, 28]. For the most part, as Sandler contends, "women administrators remain concentrated in a small number of low-status areas that are traditionally viewed as women's fields (such as nursing and home-economics) or in care-taking roles (such as in student affairs and affirmative action) or in other academic support roles (such as admissions officer, registrar, or bookstore manager)" [71, p. 176].

In sum, though all university faculty are expected to teach and to serve, as well as to research, male and female faculty exhibit significantly different patterns of research, teaching, and service. Men, as a group, devote a higher portion of their time to research activities, whereas women, as a group, devote a much higher percentage of their time to teaching and service activities than do men. The result is that men pub-
lish more extensively than do women [ $3,6,7,12,18,19,83$ ]. In 1979 Cole reported that, over their career, men averaged 12.6 publications compared to 7.6 for women [23]. A decade later, as more and more institutions moved into the "publish or perish" mode, the gender gap in publishing rates remained significant. Men published almost twice as many articles and books as women from 1986-88 [83, p. 156]. In 1989, 35 percent of men, but only 13 percent of women, had published eleven or more articles in professional journals; and 49 percent of men, but only 36 percent of women had ever published or edited a book [15, A19, A-20].

These differences in "research productivity" can be explained by women's structural position in the university: women, as a group, carry heavier teaching loads, bear greater responsibility for undergraduate education, and have more service commitments. Women also have less access to graduate teaching assistants, travel funds, research monies, laboratory equipment, and release time for research [ $6,19,30,90]$. The net result is that utilizing research as the primary criterion for tenure and promotion, while devaluing teaching and service, will not separate the men from the boys (or the women from the girls) so much as it will separate the men from the women. As Harding claims, women are, in large part, assigned responsibility for domestic and emotional labor in their workplaces as well as in their homes, whereas men are assigned the "head" work. And, as in the home, these two functions are causally related. It is because faculty (and other) women manage daily domestic affairs and perform caregiving work, that faculty men are free to "immerse themselves in the world of abstract concepts" [38, p. 55]. Yet the distinctly social (as opposed to natural) character of women's work, is invisible from the male vantage point [55, 76]. Hence, inside the university, as outside it, we find a gendered division of labor wherein women assume primary responsibility for nurturing the young and serving men, but receive little credit for doing so.

## "Just Say No"

A standard response to such concerns is to advise female faculty especially those who are untenured - to "just say no" to such extra assignments. "Don't do so much course preparation. Don't serve on so many committees. Don't spend so much time on things other than research"[see, for example 2, p. 395]. There are two difficulties with this response.

First, the response is naive. It assumes that junior, female faculty can refuse teaching and service appointments with few, if any, negative repercussions. This is a dubious assumption, which demonstrates little
thoughtfulness about relations of power inside the academy. ${ }^{4}$ Junior faculty often have little control over their teaching loads, class sizes, or course assignments. The much touted "academic freedom" does not extend to the freedom to refuse teaching assignments - especially not for untenured faculty who need to prove to their colleagues that they are "team players." Nor is it easy for junior faculty to "say no" to service assignments "offered" them by their superiors (their chair, their dean, their university president - in short, those people who can effectively deny their tenure). Though they may receive little credit for accepting these tasks, untenured faculty will fear reprisal for rejecting them. This double-bind is exacerbated for female faculty whose participation on university committees raises a dilemma unique to women and minorities: "Either they must accept more committee assignments than their male colleagues or face the charge of being uncooperative in satisfying a demand [for representation] that they themselves created" [82, p 230; see also 71, 75].

In addition to being naive, the advice to refuse teaching and service obligations begs the question. Even if a young, untenured faculty person could refuse certain teaching and service obligations without repercussions, the notion that she should say "no" assumes that this work is unimportant or, at any rate, less important than research. But this assumption is precisely what is at issue.

Women may feel that the time they devote to teaching and advising is important for several reasons. First, women, like minority men, are apt to place a greater emphasis on curricular and pedagogical issues than white males insofar as they are more likely to perceive, and work to correct, biases in traditional curricula. As Rich notes, traditional disciplinary canons have repeatedly obscured and devalued the history and experiences of women: "Outside of women's studies . . . we live with textbooks, research studies, scholarly sources and lectures that treat women as a subspecies, mentioned only as peripheral to the history of man" [68, p. 123]. That women have noted this and are working to correct it is evidenced by the fact that faculty women are more likely than faculty men to develop new courses that incorporate gender as well as broader cultural concerns. Faculty women are six times more likely than their male colleagues to teach a women's studies course and more than twice as likely to incorporate readings on women or gender issues into all of their undergraduate courses. Women are also significantly more likely than men to teach ethnic studies courses, incorporate readings on racial or ethnic issues into their courses, and attend workshops dealing with issues of gender, race, and culture [6].

The style, as well as the content, of traditional pedagogy may serve to
exclude and alienate women. As Belenky et al. have argued, women's ways of knowing may be stifled by the traditional lecture format, wherein the professor appears as the omnipotent authority, takes few risks, and permits the students to see only the product and not the process of his thinking [10]. This format silences women by treating them as merely the passive receptacles for someone else's truth. This silencing is further exacerbated by traditional evaluation techniques which emphasize grades based on the product, rather than the process of student learning. More conducive to women's intellectual emotional and personal) development is a pedagogy that emphasizes "connection over separation, understanding and acceptance over assessment, and collaboration over debate"; a pedagogy that "accord[s] respect to and allow[s] time for the knowledge that emerges from firsthand experience" and, instead of imposing the instructor's own expectations and requirements, "encourage[s] students to evolve their own patterns of work based on the problems they are pursuing" [10, p. 229].

That women are also (at least implicitly) aware of this and working to improve pedagogical techniques is evidenced by the fact that faculty women are significantly less likely than their male colleagues to use extensive lecturing as their primary instructional method. Conversely, women are significantly more likely to use class discussion, cooperative learning, experiential learning, field work, group (as well as independent) projects, and student-developed activities as methods of instruction. Faculty women also utilize a greater variety of evaluation techniques than faculty men. While women do utilize standard assessment techniques, such as mid-term and final examinations and multiple choice quizzes, women are significantly more likely than men to assign weekly essays and student presentations and to involve students in evaluating one another's work. Women faculty are also significantly less likely to grade on a curve [6].

In addition to spending more time on their teaching, women, like minority men, may place a greater priority on advising students because they are more likely to perceive themselves as having a special responsibility to student members of their own demographic constituency. They may be more aware of the social, personal, and academic difficulties faced by young women or young men of color on a campus marked by explicit or implicit sexual and racial politics, more knowledgeable about (institutional and extra-institutional) sources of support, and better able to provide pragmatic advice. Yet, because of the small numbers of female and minority faculty at research institutions, such a sense of responsibility may leave such faculty members feeling torn by conflicting expectations. The advice to resolve such role con-
flicts by simply prioritizing research is problematic insofar as it ignores the very real needs of students. In the words of one faculty member: "I prefer research . . . [but] it's not so easy - there is standard advice both to new faculty and to women - 'You don't have to spend so much time with students.' But in my case, often because they're foreign students, they really do need time. . . . I've spent a lot of time and . . . am trying to regain a balance" [75, p. 60, emphasis mine].

Finally, women (unlike men of color) may feel that the time they devote to their teaching is important because of their gendered ethical perspective. The advice to spend less time with students in order to devote more time to one's personal research projects encourages faculty to reason in terms of what Gilligan names a (masculine) "ethics of justice" rather than a (feminine) "ethics of care" [37]. According to Gilligan, men are trained to make moral decisions by establishing a rational hierarchy of (abstract) rights and duties, whereas women are socialized to define morality in terms of responsibilities that stem from compassion for and (concrete) connection with others. These different ethical perspectives are exemplified in male and female faculty's attitudes towards teaching. Not only do women spend more time on teaching and teachingrelated activities, they also teach differently than men. As noted above, women are significantly more likely than men to utilize collaborative learning techniques. These differences in pedagogical style appear related to differences in pedagogical goals. While almost all (male and female) faculty emphasize the importance of developing undergraduates' ability to think clearly, female faculty are significantly more likely than male faculty to cite the personal, professional, moral, emotional, and social development of their students as essential goals of their teaching. In 1989-90, 77 percent of women, compared to 64 percent of men claimed that enhancing their students' self-understanding was an essential educational goal. Seventy-one percent of women, compared to 58 percent of men, aimed to prepare students for employment. Seventy-one percent of women, compared to 60 percent of men, wanted to help students develop personal values, and 62 percent of women, compared to 54 percent of men, hoped to develop their students' moral character. Fifty percent of women, but only 36 percent of men, attempted to provide for the emotional development of their students. Women were also significantly more likely than men to cite "enhancing students' out-of-class experience" and "preparing students for family living" as essential educational goals [6, pp. 63, 83]. These differences in pedagogical goals suggest that female faculty are less likely than their male colleagues to view their students (dispassionately) as merely the abstract holders of intellectual rights and more apt to connect with
them (compassionately) as concrete, embodied human beings with diverse, complex needs. To the extent that this is true, women may find the advice to stop spending time with students morally problematic and difficult to heed.

For similar reasons to those given above, women (and minorities) may view their service work as important and have difficulty abandoning it. Women (and minority) faculty are more likely to devote time to service activities insofar as they are more likely than white men to perceive the need for change in the policies, procedures, and institutional structure of the university. Women (and minority) faculty are also more likely to perceive themselves as having a special responsibility to other female (and minority) faculty and, indeed, to other women (and minorities) outside of the academy. For both these reasons women may accept - or even seek out - positions on various university committees. They may also freely devote time to mentoring their more junior colleagues, give free public talks, and volunteer for community projects.

Allen notes that gender and ethnicity affect faculty workloads and research productivity and suggests that the lower research productivity of white women, African American women, and African American men is attributable, in part, to different values and priorities: "Faculty members from different demographic groups . . . have different attitudes about and expectations for academic work. [There is] a possible mismatch between institutional demands and the perspectives of women and minority faculty members" [3, p. 34]. This mismatch is exemplified by women's attitudes toward service, as well as their attitudes toward teaching. Women are less likely than men to emphasize research and significantly more likely than men to emphasize being a good colleague, providing services to the community, and participating in committee and administrative work as important professional goals. This indicates that women's professional priorities are less likely than men's to be aligned with the research priority of the contemporary academy. In 1989-90, for example, 86 percent of women cited collegiality as professionally important, whereas only 52 percent viewed engaging in research as important. And women viewed community service as equal in importance to research [6, pp. 62, 82].

The notion that female faculty should cut back on their teaching and service work in order to devote more time to their research makes sense only if one prioritizes women's individual efforts to advance within the system over women's collective efforts to transform prevailing norms and practices. It thus ignores the fact that faculty women may feel a responsibility to, and compassion for, both their female colleagues and their female students, in addition to women outside the academy $[9,56$,

68]. Teaching and service activities are crucial for the personal, intellectual, and professional advancement of academic women as a group. Insofar as tenured faculty women see mentoring untenured faculty as an imposition, it will be difficult to retain female faculty. Insofar as female faculty view teaching and advising female students burdensome, it will be difficult to bring more women into faculty posts. As Rich notes, fragmentation among academic women "is merely a replication of the fragmentation from each other that we undergo in the society outside." If academic women accept the premise that their professional advancement, job security, and opportunities for scholarship "lie in propitiating and identifying with men who have some power" (for example, tenured male researchers, chairs, deans, journal editors), they will continue to find themselves "in competition with each other and blinded to [their] common struggles" [68, p. 124].

One of the primary barriers to success for female faculty is the "lack of a supportive, even hospitable, climate" 90 , p. 176; see also 71]. Faculty women often cite intellectual and social isolation as a primary source of job dissatisfaction [5, 6, 90]. This isolation is perpetuated by a masculine ethic of competition and individualism. As one administrative woman says, "I find it difficult to get ahead personally if it involves competition. . . . I [do] strive to better myself . . . but always within the context of cooperating with other people; . . . some people [try] to make a name for themselves . . . at the expense of other people. . . . It has been a real problem for me. . . . I often wonder if I'm going to be successful in this kind of position. . . . I don't like competition that requires that in order for one person to win another has to lose" [2, p. 396]. Intellectual and social isolation is also perpetuated by an exclusive focus on research productivity. As one black faculty woman states: "I want to live my life. I do not want to sit in cloistered halls . . . writing academic papers for the rest of my life. That isn't a life" [5, p. 192].

In addition to being a source of personal dissatisfaction, intellectual and social isolation - often experienced most severely by minority academic women - prevents women's professional advancement. Despite the prevailing notion that academic success results solely from individual talent and hard work, "moving through the system of rewards and status requires knowing colleagues who can provide the guidance, support and astute insight into the political processes of the institution" [90, p. 177].

These considerations suggest that advising women to abandon teaching and service responsibilities for the sake of enhancing their research productivity is misguided. It is important for women to engage in
teaching and service activities both for their own growth as individuals, and for their advancement as a group. Classroom and advising activities, while time-consuming for faculty women, may also provide a source of human relationship for women that makes their work more meaningful. And committee and community work may likewise fend off feelings of social isolation, in addition to providing important intellectual and professional contacts - especially for nontenured women. As the Carnegie Foundation's survey results suggest, faculty who are located at teaching institutions (liberal arts and community colleges), and those who actively participate in university governance, are more likely to perceive a "sense of community" on their campus and are less likely to leave their institution [18, 19].

In sum, the notion that women should improve their research productivity by refusing anything more than minimal teaching and service responsibilities arises from a masculine perspective that mirrors sexist attitudes that exist outside the academy. In privileging research, it values the abstract theoretical labor of men, while it simultaneously exploits and devalues the concrete emotional and domestic labor of women (wives, secretaries, research assistants, adjunct teachers, and "regular" female faculty) that makes theoretical activity possible [38, 68, 76]. In inviting "exceptional" women to join the ranks of researchers, it encourages women to likewise exploit and devalue (unpaid or underpaid) "women's work" - thus ensuring that those chosen few will remain tokens.

## "But, There's No Way to Evaluate Teaching and Service"

Some individuals acknowledge difficulties with valuing research more highly than teaching and service, but argue nonethless for retaining the present faculty evaluation system on pragmatic grounds. "While the present system of measuring faculty merit may not be perfect," the argument goes, "it is too difficult to objectively measure the quality of faculty teaching and service" [see, for example, 75, p. 52]. This response denotes a lack of imagination and highlights the double standard used to evaluate research, on the one hand, and teaching and service, on the other.

It is certainly not impossible - although it may be time-consuming - to assess the quality of a faculty member's teaching and service. Though it is true that current methods of evaluating teaching are fraught with difficulties, these methods could be refined, developed, and expanded to achieve more accurate and objective results. Currently, student responses to multiple-choice questionnaires are the primary tool used in evaluating classroom performance, but the objectivity
of these student evaluations of faculty has been the subject of much debate [34]. For example, there is evidence that high student evaluations of faculty correlate positively with high faculty evaluations of students and small class sizes [67, 89]. Thus, those who resist grade inflation and teach large classes may be unfairly penalized. There is also evidence that women faculty are rated more negatively by students than male faculty [71, 75].

Yet, with a little imagination (and a little research), one can easily find ways to overcome or at least compensate for these difficulties. First, the student evaluation tool could itself be refined to deemphasize the "grading" of faculty and instead emphasize students' reasons for valuing or devaluing a course or instructor. ${ }^{5}$ Second, student evaluations could be examined alongside records of grade distribution and class size. Finally, student evaluations could be supplemented by peer evaluations, a chair evaluation, a dean evaluation, the evaluation of external referees, and a self-evaluation. The evaluations of faculty by their peers and superiors could be based on classroom visits, interviews with a representative sampling of current and former students, evidence of scholarship (including, but not limited to publication) relating to the faculty member's teaching methods or course content, evidence of new courses developed or revisions to existing courses, and samples of teaching materials, such as syllabi, reading lists, handouts, assignment sheets, tests, and copies of graded work and completed student theses and dissertations [57, 73, 86, 89]. Utilizing a diverse array of evaluators and evaluative tools should help counteract potential bias and render reasonably accurate results.

Although there has been sparse scholarship concerning evaluations of faculty service, here too one can imagine reasonably objective methods of making such evaluations. As in evaluating teaching, evaluating service should rely on a spectrum of evidence. Such evidence might include the testimony of colleagues in professional organizations, university and college co-committee members and committee chairs, departmental colleagues and chairs, members of community groups or businesses a faculty member has served, and members of student organizations a faculty member has advised. In addition to such testimonial evidence, evaluators might also examine written documents from committee and other archives, active policies and programs that have resulted from service commitments, scholarship related to a faculty member's service, and self-evaluations of service.

In addition to looking at the quality of a professor's teaching and service, a tenure and promotion committee should also consider the
quantity of her teaching and service. Pertinent information here includes the number of courses taught per year (including overload teaching at branch campuses), total student contact hours (courses taught $x$ the number of students in each course), the number of different course preparations, the number of new courses developed, the number of students assigned for advisement and placement, and the number of student theses, dissertations, practicums, and independent studies supervised. With regard to service, relevant information would include the number of professional or administrative offices held and the length of time served in those posts, the number of university committees served on (along with a rough approximation of the number and length of times those committees meet per year), the number of community presentations given, the number of student organizations advised and the length of time served as an advisor, and the amount of consulting work done.

Though one might argue that the quantity of one's teaching and service should be less important than its quality, both need to be taken into account, because women do a disproportionate amount of teaching and service and one might expect there to be an inverse relationship between the two factors. Simply put, the larger the number of students one is responsible for teaching, the less "quality time" one will be able to spend with each individual student. Likewise, the more service assignments one accepts, the less time one may have to devote to each assignment.

One might also hypothesize an inverse relationship between the quantity and quality of research. While proponents of the present criteria for tenure and promotion overemphasize the importance and difficulties of assessing teaching and service quality, they deemphasize the importance and difficulties of assessing research quality. Indeed, most evidence suggests that research is assessed merely according to quantity, rather than quality, of publication.

Over twenty years ago, the Commission on Academic Tenure in Higher Education bemoaned the results of this assessment process: "Review committees are impressed by the number of publications rather than by their significance. Extrinsic signs such as the general reputation of journals or publishers are often substituted for a positive assessment of the work itself. Nontenured members of faculties, believing that largely quantitative tests of publication prevail, lose confidence in the evaluation process and are often prompted to undertake quick projects that will expand their bibliographies, rather than to work on more difficult or more long-term projects" [cited in 86, p. 34]. Yet, in 1989 the

Carnegie Foundation reported a continued institutional emphasis on quantity of publication. Fifty-seven percent of the faculty surveyed believed that the number of publications was important in tenure decisions, and 38 percent reported that at their institution publications were merely counted, not qualitatively assessed. Among faculty at four-year institutions, these numbers jumped to 80 percent and 47 percent, respectively [18, pp. 49, 50].
This quantity over quality approach to assessing research publication encourages conservative research that can be completed within a short time. It also encourages the submission of articles for publication without the refinement of ideas that might otherwise take place. In both these ways, emphasis on "research productivity" may lead faculty to compromise their personal and intellectual values. Assistant and associate professors surveyed by Verrier reveal that they are "taking on short-term, conservative research projects, often not central to their current research interests nor tapping into their more creative energies. Research activity is directed to tasks that they believe will be rewarded - for example, attaining grants, writing a book, publishing a steady output of 'least publishable units'" [84, p. 116].

There is, thus, a double standard that pertains to the assessment of research, on the one hand, and teaching and service, on the other. Although measuring the quality of research, teaching, and service is not impossible, it is clearly more difficult and more time-consuming than simply counting the number of articles published, courses taught, and committees served on. The import of this difficulty is different, however, for teaching and service than it is for research. The difficulty of assessing teaching and service quality results in a devaluation of these activities, while the difficulty of assessing research quality results in the adoption of a quantitative approach to measurement.
Women, as a group, are negatively affected by this double standard. The emphasis on teaching quality over quantity ensures that female faculty are not rewarded for carrying higher than average teaching loads. And the emphasis on research quantity over quality ensures that female faculty will be penalized for having shorter than average publication lists. Feminists (and other innovators) will be particularly hard hit by prevailing methods of assessment. Feminist scholarship is, by definition, not conservative. It seeks to radically redefine concepts, issues, research paradigms, and pedagogical methods. This scholarship represents one of the most significant research developments in the latter twentieth century, but it is time-consuming scholarship [54]. Thus, institutional norms that emphasize quantity over quality of research will inevitably devalue the research contribution of the feminist scholar.

## Research Has Instrumental Value

The arguments for prioritizing research over teaching and service examined above focus on the necessity of utilizing the research criterion in evaluating the relative merit of faculty members. These arguments fail insofar as "research productivity" is, at best, only one of several indicators of faculty merit. There is, however, another set of arguments for emphasizing research in tenure and promotion reviews - arguments that focus instead on the usefulness of research and, hence, researchers. These arguments, to be examined below, are as follows: (1) research advances and disseminates knowledge, (2) research aids teaching, and (3) research enhances personal and institutional reputation.

## "Research Produces and Disseminates Knowledge"

It is often argued that research is integral to the mission of the university in that it advances and disseminates knowledge. Producing and disseminating knowledge is (and should be) a central part of a university's mission. But whether or not it is plausible to view research as the primary or, indeed, only avenue to pursuing this goal depends on how we interpret "research." It also depends on questions surrounding what sort of knowledge is produced and whom it is intended to reach. Although research, understood as an activity leading to scholarly publication, is an important method of producing and disseminating certain types of knowledge to particular groups of people, research in this narrow sense is neither sufficient nor necessary for carrying out the university's more general scholarly mission.

Publishing the results of one's experimental or theoretical investigations is not sufficient for the dissemination of knowledge. Publication depends on the prior conception, development, and completion of a successful, or at least minimally interesting, research project - a project that may have involved several acknowledged and unacknowledged persons and institutions besides those who have written up the results. One can publish, and thus disseminate knowledge, without doing the research that actually produces the knowledge. As Schiebinger notes, the history of science as a history of man-made discoveries has overlooked the fact that women "have served science well in their positions as invisible assistants" [72, p. 264]. The wives, daughters, and sisters of male scientists, barred from the public world of science and refused access to necessary resources - yet nonetheless devoted to science often became the private (and unacknowledged) assistants to their male relatives in the nineteenth century. In the twentieth century it is not uncommon for graduate students or junior faculty members in the natural and social sciences to perform laboratory experiments, take
polls, or compile statistics - much as wives, daughters, and sisters previously did - the results of which are summarized and published by their advisors or mentors. Within the academy, as outside of it, a division of labor may exist such that the person or persons who are responsible for beginning a project may not be the same person or persons who finalize that work or distribute (and receive credit for) the resulting product. To equate research and publication obscures this (often gendered and always class-based) division of labor.

Moreover, publishing in scholarly journals is not the only, nor even the best, method of disseminating knowledge. Given the typically small number of people who read most academic journals and treatises, publishing in the popular media may be a more effective method of disseminating knowledge. Yet, as already noted, current tenure and promotion criteria trivialize this activity, as the following comments from a social scientist further indicate: "My research on women and obesity had been published in the public media (where it had apparently been contaminated). The provost asked me for examples of my work and I gave him some of the press releases as an indication that the larger community was interested in it. Instead of asking me for copies of the papers on which these press releases were based, he [said] my material was not substantively academic" [78, p. 50].
"All too often," as hooks notes, "educators, especially university professors, fear their work will not be valued by other academics if it is presented in a way that makes it accessible to a wider audience" [41, p. 111]. This fear is no mere paranoia. Current tenure and promotion guidelines devalue - indeed may negatively value - research topics and styles that are interesting and accessible to a general audience, encouraging instead a form of scholarship that is both elitist and exclusionary [68]. This suggests that arguments for prioritizing faculty research based on the university's mission to disseminate knowledge may be disingenuous. If university administrators are genuinely concerned to provide intellectual ideas and discoveries to as many people as possible, they should encourage, rather than dismiss, those faculty who are interested and skilled in reaching mass audiences.

Teaching, conference presentations, and community talks are also effective, yet devalued, methods of disseminating knowledge. Like publishing in the popular media, these methods of spreading knowledge undoubtedly reach a greater number and more diverse groups of people (including more women) than are reached by publishing in academic journals. Unlike publishing in any print media, however, these oral methods of spreading knowledge have the advantage of reaching people who cannot read or write. Until everyone in this country is literate,
intellectual ideas must still be spread by word of mouth. In addition to reaching a wider and more diverse audience, oral methods of communication also have the advantage of permitting the audience to "ask questions, clarify issues, give feedback" [41, p. 110]. Thus these alternative methods of reaching people might help to extend and transform, as well as disseminate, knowledge.

## "Better Researchers Are Better Teachers"

Because it seems prima facie reasonable, at least to taxpayers, parents of students, and students themselves, to see a professor's primary responsibility as that of teaching, many university administrators have begun to emphasize the connections between research and teaching. We are told that "professors actively involved in research will be better teachers." Is this true? Not necessarily. Whether or not research involvement enhances our teaching depends, once again, on how we define research. It also depends on whom and how we teach.

The expectation that doing research will improve a faculty member's teaching is based largely on the assumption that "scholarship makes a professor more knowledgeable and that a more knowledgeable professor makes a better teacher" [31, p. 145]. ${ }^{6}$ But this is simply not true if we equate scholarship with research, measured in terms of number of publications. Indeed, Friedrich and Michalek discovered that "more active researchers are seen as being less knowledgeable. This result is consistent with the argument that research may increase a teacher's knowledge in a specific area at the expense of more general knowledge. . . . Immersion in research apparently can breed a narrowness that detracts from the broad-based knowledgeability that students perceive as being an important element of good teaching" [31, pp. 153, 160].

Research, as defined for the purposes of tenure and promotion reviews, is an activity that results in a finished product - a journal article, book, or other creative work. ${ }^{7}$ Scholarship that contributes to faculty knowledgeability and hence to good teaching, however, is best understood as professional development - doing library work, reading, making inquiries, attending workshops, using computers, improving one's communication skills, and so forth. Faculty women spend more time than faculty men on these sorts of professional development activities $[6,83]$. This aspect of women's scholarship may not result in a concrete product and is best understood as an ongoing process [13, 14].

In sum, although there is a plausible connection between professional development and good teaching, the connection between publishing and teaching is more dubious. An effective teacher must be knowledgeable about her subject matter, including recent developments
in her field, but it is not necessary for an effective teacher to have a long list of publications or the notoriety that may come with such publication [11]. Attending conferences, workshops, reading relevant materials, and honing certain skills may be sufficient. Indeed, doing more than this may, and in many instances does, detract from the quality of one's teaching.

There is an overwhelming amount of evidence which suggests that, in general, faculty make forced choices between teaching and research. Over half of the faculty surveyed at research and doctorate universities claim that at their institution "the pressure to publish reduces the quality of teaching" [18, p. 51]. And although some empirical studies suggest that the pursuit of research enhances teaching effectiveness [30], most studies of the relationship between research and teaching suggest either that they vary independently, or that they are negatively correlated $[3,11,14,15,27,31,52,60,61]$. The most recent studies typically suggest that teaching and research may have been complementary in the past, but now stand in an inverse relationship with more research coming at the expense of teaching time. Allen explains this as follows: "A generation ago, faculty members resolved conflicts between teaching and research by expanding their workweeks. But the eight-hour growth to a fifty-three-hour workweek makes future increases unrealistic, and faculty members invest hours at the margin to rewarded and recognized activities" [3, p. 30]. As Keohane suggests, while discovering and sharing knowledge are related, "at the pragmatic level of the disposition of professorial time and the deployment of resources, research and teaching often do conflict. Time spent in the laboratory or library grappling with a research problem competes with time spent elsewhere, including the classroom. Time spent preparing to convey knowledge to undergraduates in terms that will be sensible to them is time not spent describing the results of one's research to informed colleagues. Following up on a graduate seminar over coffee in the common room takes time that might have been spent at the computer writing the next grant proposal" [51, p. 105; see also 22].

These considerations suggest that the present argument is also disingenuous [61]. Surely university administrators recognize - certainly they should recognize - the time allocation problems that current faculty face. Moreover, if a primary value of research is its perceived benefits for teaching, then one might wonder why teaching activities are less respected and rewarded than research activities.

Nonetheless, the assumption that teaching and research are complementary rather than competing activities may make sense if one teaches specialized, senior, or graduate level courses [42,52]. Although, in gen-
eral, time spent on research will take time away from teaching and viceversa, "it is also conceivable that particular types of teaching may have complementary effects on research activity, thus enhancing an individual's research record and likelihood of promotion. . . . For instance, graduate level teaching might increase access to high quality advisees or graduate research assistants. Also, teaching courses in one's specialty might complement an individual's research activities" [52, p. 152].

Boyer likewise suggests that scholarly investigation and classroom instruction will often mesh in the context of a graduate seminar, noting, "At that level, faculty and student cultures intersect and, further, graduate faculty often have a very light teaching load to accomodate their research." "But," he continues, "at the undergraduate level, and most especially in general education courses, research work often competes with classroom obligations, both in time and content. Faculty assigned to teach such courses frequently must take shortcuts in their research or rely heavily on teaching assistants - an arrangement that is often less than satisfactory for both student and professor" [15, p. 55].

Once again, this suggests that current tenure and promotion guidelines are a source of job stress for faculty. Junior female faculty will suffer a distinct disadvantage, because they not only carry heavier teaching loads but are significantly less likely to be assigned graduate courses [52, 60]. Whereas faculty teaching graduate courses (predominantly male) need to know a lot about a little, faculty teaching lowerdivision, general education, undergraduate courses (disproportionately female) need to know a little about a lot. The former more specialized knowledge will, but the latter more general knowledge will not, easily translate into publication.

## "Research Enhances Reputation"

Despite all this, if one desires to enhance one's academic reputation or advance one's academic status, one must publish - often and in the right places. One's name must regularly appear in print in relevant journals, periodicals, conference proceedings, and citation indexes in order to achieve professional recognition within one's field. In the contemporary academy it is professional recognition in this sense that counts, but once again we should ask whether or not this is what should count, or at any rate whether or not this is all that should count. Why should research, in the sense of publication, be "the currency of the realm" [81, p. 462]?

One final - although not very persuasive - rationale for rewarding publishing researchers more highly than effective teachers or servers concerns the prestige that research brings to an institution. In a nut-
shell, the argument is that hiring, retaining, promoting, and otherwise rewarding those who do research will enhance a university's - and a university administrator's - reputation. As Cole notes, the current emphasis on faculty research productivity stems from competition among universities "to be 'the best' and to be perceived as among the best." Such perceptions, he contends, "will not result from hiring and promoting those who have extraordinary track records as teachers," but will instead come from hiring faculty "whose research publications are envied by others; . . . institutional legitimacy is obtained predominantly through research achievements. That is what academic leaders have coveted; . . . research excellence is a measure of an academic leader's performance in office . . . [and] legitimates the university's claim to greatness" [22, p. 24; see also 61].

This response is useful in highlighting the fact that a university does not operate in isolation, but instead operates as part of a (relatively homogenous) higher education system [15]. Thus, the value placed on research within a particular institution reflects (and is reflected by) the value placed on research among universities. Yet, the response fails to be persuasive because - like other arguments considered above - it largely begs the question. We still want to know why research should be so highly prized, envied, and coveted.

The arguments for ranking universities on the basis of their research output parallel those offered in support of promoting faculty on the basis of their research productivity, and they suffer the same flaws. One argument suggests that because all universities and colleges provide classes and serve their constituencies, research is the only means of differentiating academic institutions. This argument, like the argument for treating research as the sole indicator of faculty merit, treats teaching and service as homogenous activities. But, this overlooks the unquestionable differences in the quantity, quality, types and sizes of classes, and the wide variety in students' campus experiences, from one institution to another [14]. Likewise, it ignores differences in the quantity, quality, and types of services offered among institutions and the alternative constituencies served by different institutions.

A second argument admits these forms of diversity among universities, but maintains that research excellence is, nonetheless, the only way to objectively evaluate (and rank) academic institutions. In the words of one administrator, there is no "trustworthy interinstitutional metric" for judging the quality of an institution's teaching or service comparable to the one available for judging an institution's research excellence [51, p. 106]. This argument, like the pragmatic argument for using research productivity as the primary indicator of faculty merit,
suggests a lack of imagination. One suspects that the absence of an "interinstitutional metric" for evaluating teaching, advising, and service is the result, rather than the cause, of a devaluation of these activities.

Tuchman, Gapinski, and Hagemann suggest that greater recognition accrues to research than to teaching and service because "the output of researchers is more visible, consisting of articles, books, and other published pieces which often attract a national audience. . . . [Teaching and service] activities are more inclined to receive local rather than national recognition" [80, p. 93]. This raises two further questions: Why is national recognition more important than local recognition? And why (and to whom) is research more nationally visible?

To be nationally rather than locally recognized, in the present context, is not tantamount to being visible to more people. Nor does it entail being visible to a more diverse range of people. Teaching and serviceoriented faculty are visible to large numbers and to a diverse group of people - students, department and university colleagues, members of community, public and business organizations, and so forth. Researchoriented faculty, on the other hand, may be visible to a relatively small number and to a homogenous group of people - other academics at other universities whose (typically narrow) areas of research interest match their own.

Thus, although publishing may be both necessary and sufficient for enhancing a narrow academic reputation within small (albeit national) academic circles, it is not necessarily the most effective method of building good will that goes beyond those circles. Teaching and community service are integral to building a personal and institutional reputation among one's students and members of one's local community for honesty, integrity, fairness, caring, and compassion. Building such an institutional reputation is unlikely, however, if the faculty within a university are only rewarded - indeed, only retained - for single-minded efforts to produce lengthy, jargon-filled treatises on topics of interest only to fellow specialists.

## Redefining Scholarship and Women's Roles as Scholars

It is only by virtue of the ambiguity of the term "research" that arguments for prioritizing research as a criterion for tenure and promotion appear plausible. Research, conceived as a search for truth, is an important factor in expanding the boundaries of knowledge. But research, measured in terms of quantitative output, mitigates against the development of novel ideas and approaches. Research, understood as professional development, is an important factor in pedagogical effec-
tiveness. But research, in the sense of scholarly publication, favors disseminating specialized knowledge to an elite circle over providing general knowledge and useful skills to a diverse public. Yet, it is only research, narrowly understood as publication and measured quantitatively, that counts substantially toward individual and institutional advancement. When it is said that research is integral to the mission of the university, therefore, we must be careful to scrutinize what, precisely, is meant by research. We must also initiate a serious dialogue concerning what, exactly, the mission of the university is.

## The Mission of the University in Historical Perspective

For the past several decades, the prevailing assumption has been that the mission of the university is "to advance, disseminate and apply knowledge" in that order $[6,51,65,66]$. "Basic" or "pure" research has been prioritized with teaching and public service tacked on as ancilliary goals. The mission of the university has not always been conceived this way, however. The contemporary American research university is "a hybrid" of several earlier traditions [51, p. 103].

In the seventeenth and eighteenth centuries, the mission of the academy was largely a moral and spiritual one: "the colonial college . . . focused on the student - on building character and preparing new generations for civic and religious leadership" [15, p. 3]. American colleges, such as Harvard, were built on the British undergraduate teaching model, where students were the central focus of academic life, and faculty were hired to serve as "educational mentors" within and outside of the classroom [p. 4]. This conception of the mission of the academy, which respected teaching as a vocation, continued into the nineteenth century at institutions such as Harvard, but was slowly transformed by an alternative conception advanced by the nation's first technical schools.

From the early nineteenth to the early twentieth century, the mission of the academy came to be viewed as largely a practical and economic one: higher education's focus shifted "from the shaping of young lives to the building of a nation" [15, p. 4]. Early technical schools emphasized the goal of training young people to build railroads, bridges, and other parts of the American infrastructure. Colleges such as Harvard, while still emphasizing classroom instruction, began to link teaching to the institution's role "in the service of business and economic prosperity" [p. 4]. In the latter half of the nineteenth century, the new landgrant universities focused on providing knowledge that would improve agriculture and manufacturing. Thus, "American education, once devoted primarily to the intellectual and moral development of students, added service as a mission." Although Stanford's president may have
overstated the case, declaring in 1903, "The entire university movement in the twentieth century is toward reality and practicality," most agreed that higher education was justified in terms of its usefulness [15, p. 5].

Only recently has the mission of the academy come to be viewed as largely a theoretical and (allegedly) objective one. While research began to emerge as a central part of the university's mission in the midnineteenth century, the university's research agenda was, at that time, practically indistinguishable from its teaching and service goals. "Professors were hired to teach the science that was already known" so that students could apply this knowledge in their work and communities "to add to that knowledge was not expected" [88, pp. 5, 51]. By the latter part of the nineteenth century, however, the universities of Pennsylvania, Harvard, Columbia, Princeton, and the newly founded University of Chicago began to emphasize graduate education modeled on the Ph.D. programs of the German research university - a model that required original research culminating in the doctoral dissertation. By the turn of the century evaluations of faculty at several institutions were also beginning to stress the importance of research productivity. At these institutions research became sharply distinguished from teaching and service. Though undergraduate education remained a function of the university, "for many professors, class and lecture work became almost incidental." Service likewise became devalued: "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" [15, p. 9].

With the exception of the German-inspired research universities, however, most universities and colleges continued to define their mission in terms of undergraduate education and service until the midtwentieth century. Until World War II, "academic concerns were primarily practical and local, not theoretical and national" [65, p. 199]. During World War II, however, service took on a more national perspective and scientific research gained public recognition as integral to the security of the nation. Federal funding for research increased dramatically over the next four decades, and the research priority which had previously characterized only a few institutions became widely shared [65]. Today, undergraduate education and community service goals have been overshadowed by an emphasis on graduate education and research at almost all academic institutions. With the exception of two-year colleges, postsecondary institutions have shifted their focus "from the student to the professoriate, from general to specialized education, and from loyalty to the campus [and local community] to loyalty to the profession" [15, p. 13].

In the post-cold war period, however, the public has become increasingly skeptical concerning the justification of research institutions' "claims on the public purse," and federal research monies have been drastically reduced [65]. More generally, the public has questioned the accountability of the academy and academics, as faculty retreat from the classroom to pursue esoteric research projects that seem increasingly disconnected from both national social concerns and local community needs. Decreasing federal funds for research and declining public support for higher education has left academic institutions competing for increasingly scarce resources at the same time that research costs are escalating and student enrollments are burgeoning [61]. Yet, the research emphasis among and within universities has remained largely unquestioned. One result has been, as suggested above, "the emotional and economic exploitation of women" for the sake of "the 'work' of a few men" [68, p. 124]. Less external research monies, combined with an increased internal emphasis on the importance of research has made current tenure and promotion criteria increasingly difficult to meet. This has been especially true for women who may have little time (and in some cases little inclination) for grant-writing and article-publishing given their extensive teaching and service responsibilities and their tendency to take these responsibilities seriously.

## An Alternative Model for Evaluating Faculty: Rereading Boyer through Feminist Lenses

Women - and those who care about women's place in the academy - can respond to this situation in two ways: by problematizing women or by problematizing the criteria by which women (and others) are evaluated. The favored response, thus far, has been the former. Even "progressive academics" whose scholarship emphasizes "the importance of critiquing and resisting racist and/or sexist discourse . . . rarely problematize the elitist practices and division of labour which produce 'superior thinkers' and 'proper scholarly practices of conceptualizing' in their own workplaces" [59, p. 120]. Women have been mentored (when they have been mentored at all) to cut back on the time they devote to teaching and service in order to concentrate on their research. The assumption underlying this advice - usually given by well-intentioned liberals, including liberal feminists - is that individual women can improve their situation if they choose to. This assumption portrays the successes and failures of women as the consequence of freely made personal choices, thus ignoring the fact that the university's current organizational culture depends upon a gendered division of labor.

Additionally, as noted above, advising women to refuse anything
more than minimal teaching and service responsibilities in order to pursue their research arises from a masculine perspective that mirrors sexist attitudes outside the academy. Such advice assumes that childrearing (teaching, advising, mentoring, and nurturing students), homemaking (departmental and institutional service), and volunteer work (community service) are unimportant, uncreative, and unchallenging tasks. No satisfactory argument is given as to why such tasks are unimportant - or at least less important than individual research. Instead this is simply assumed from the outset.

Yet clearly, this assumption is problematic. After all, the survival of an academic institution depends on the willingness and ability of some group of people to teach classes, advise students, manage day-to-day operations, and build and maintain community relationships. Developing good teacher-student and university-community relations is especially important within the current social context wherein higher education is rapidly losing public support. Yet, as long as these tasks remain depicted and devalued as "women's work," few male faculty will choose these roles. As we have seen, the group of people who currently fill teaching and service roles are women. Some of these women are also successful researchers - what Astin and Davis term "superacademic women" [6], but the majority are increasingly drawn from a surpluslabor pool of (so-called) part-time faculty who are underpaid, receive few benefits, and have no access to the resources necessary to transform their position to that of a "regular" (that is, tenured) faculty member. This suggests that feminists need to urge a reevaluation of the reigning faculty evaluation system.

One way to transform the university into a place that truly values women and fairly evaluates women's contributions is suggested by recent (re)definitions of scholarship [15, 26]. Boyer, for example, urges university faculty and administrators to overcome the myopic definition of research as the production of scholarly articles and books and to focus instead on scholarship, (re)defined broadly as encompassing the scholarship of discovery, integration, application, and teaching [15, p. 16]. Although Boyer does not argue for this expanded definition of scholarship on explicitly feminist grounds, both his thinking and his conclusions are conducive to feminism and suggest a set of criteria for tenure and promotion that would be more woman (and feminist)friendly than those currently in place.

The scholarship of discovery "comes closest to what is meant when academics speak of 'research'"[15, p. 17]. It includes research publication that contributes to "the stock of human knowledge," but emphasizes "not just the outcomes, but the process, and especially the passion
[that] give meaning to the effort" and contributes to the intellectual atmosphere of a campus. This is consistent with feminist disavowals of the passion/reason dichotomy, as well as contemporary feminist revisionings of knowledge as an ongoing process $[24,36,38,39,74,79]$. Moreover, in moving away from an exclusive focus on the product of research, the scholarship of discovery avoids the commodification of knowledge and the related devaluation of the producer (the laborer) vis-a-vis the marketer (the publisher). Finally, the scholarship of discovery, as reconceptualized here, is viewed as meritorious by virtue of its local (campus), and not merely its national (professional), contribution.

The scholarship of integration is closely related to the scholarship of discovery but emphasizes "the connectedness of things." It involves "doing research at the boundaries where fields converge" and thus emphasizes the importance of interdisciplinary research, such as that undertaken by many women's studies faculty. The scholarship of integration further emphasizes the need to interpret (both old and new) discoveries by "illuminating data in a revealing way" and "fitting one's own research - or the research of others - into larger intellectual patterns" in order to overcome the "pedantry" that can result from overspecialization [15, pp. 18, 19]. Feminist theory is integrative in just this way - it seeks to synthesize the results of investigation and detect patterns [33].

As suggested above, however, theory should not be disengaged from practice. While feminist scholarship requires a commitment to connecting disciplines, drawing together ideas, and reinterpreting evidence, it also requires connecting research to teaching and service, drawing together people and reinterpreting the role of the academic (and the academy) in the larger community. These latter activities would be encouraged by tenure and promotion criteria that emphasize the scholarship of application and teaching alongside the scholarship of discovery and integration.

The scholarship of application ties research to service by encouraging the scholar to ask "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?" [15, p. 21]. Thus, the scholarship of application encourages the scholar to passionately engage with, rather than dispassionately study, the world. It also requires scholars to be responsible for both the direction and the consequences of their research. In both these ways, it supports the feminist contention that researchers must give up the flawed distinction between objectivity and subjectivity
[21, 24, 36, 38, 39, 48, 56, 79]. The scholarship of application recognizes a dynamic relationship between the intellectual and the personal, between theory and practice. Personal experiences and social and political concerns may give rise to intellectual analyses which are tested by further experience and experiment. Theorizing suggests new ways of designing environmental policies, treating illnesses, engineering buildings, solving economic problems, and serving local communities; the practical application of ideas, in turn, tests theories and gives rise to new intellectual understandings. Thus, rather than devaluing service as trivial, nonintellectual or even anti-intellectual (because personal commitments compromise objectivity), an institution that acknowledged the scholarship of service would value service as "serious, demanding work," which produces as well as applies knowledge [15, p. 22].

Finally, the scholarship of teaching ties research to teaching, by emphasizing that "good teaching means that faculty, as scholars, are also learners" [15, p. 24]. Good teaching is not something that anyone can do; it requires knowledge of one's subject matter and the ability to organize, synthesize, and communicate that knowledge in meaningful ways to a nonspecialized audience [11, 61]. More importantly, it requires the ability to "stimulate active, not passive, learning" and provide students "with the capacity to go on learning after their college days are over." Thus, effective teaching requires a willingness to interact with students, to engage them in discussion, encourage them to think critically and creatively, listen to their comments and questions, and to "be pushed in new creative directions" oneself [15, p. 24]. This portrayal of good teaching is consistent with feminist and multicultural models of pedagogy, which view teaching as a collaborative endeavor most likely to succeed where classes are transformed into learning communities [ $9,10,55,59,74]$. Moreover, the model of teaching suggested here deemphasizes the mere "dissemination" of knowledge and reemphasizes both the importance and the difficulty of reproducing (and empowering) knowers. Thus, an institution that acknowledged the scholarship of teaching could no longer trivialize this facet of academic "women's work."

The university, as we currently encounter it, is - as Rich suggests "above all a hierarchy" [68, p. 124]. Moreover, it is a hierarchy built on the exploitation of women: the contemporary research university replicates the patriarchal family wherein fathers are breadwinners, mothers are domestic laborers, and prodigious daughters are encouraged to identify with their fathers and brothers more strongly than their mothers or sisters [68, pp. 125, 129]. If we are to transform the university into
a more woman-centered institution, then we must begin by deconstructing this gendered hierarchy. A primary focus of this effort must be the prevailing criteria for promotion and tenure.

Following Boyer, revised criteria for faculty evaluation might be depicted, nonhierarchically, as in Figure 1. As this figure indicates, these various academic functions are interrelated: application of existing knowledge may result in discoveries that can be integrated into the curriculum, and which may, in turn, prompt new interpretations of evidence, and so on. Yet, analyzing these faculty functions serves to highlight the diversity of faculty talents and contributions that deserve recognition in the tenure and promotion process. In order to assess fairly each faculty member's contributions and skills, we will need to develop an equally diverse set of evaluative tools. As suggested above, this is not impossible. Yet, it is complex and time-consuming. Hence, succeeding at this task will require considerable and diverse resources, and participation in this effort should itself be rewarded.

## Notes

${ }^{1}$ Here and below, the arguments offered in favor of the prevailing tenure and promotion paradigm are gleaned from conversations with colleagues and administrators in formal and informal settings. Explicit arguments for prioritizing research productivity in evaluations of faculty are rarely found in the published literature, demonstrating that


Fig. 1. Scholarship Reconceptualized Following Boyer [15]
this paradigm is the current "null hypothesis" [22]. The burden of proof is assumed to fall to those who would contest this paradigm.
${ }^{2}$ Minority women, as women in general, were concentrated in lower ranks, comprising 7 percent of instructors, 5 percent of assistant professors, 3 percent of associate professors and 1.4 percent of full professors. Minority men while comprising a relatively small proportion of faculty (like minority women) were fairly evenly distributed across ranks, indicating they have been more successful than minority women in gaining promotion, but less successful than white men.
${ }^{3}$ Here again both white and minority women follow similar patterns of concentration, while minority men are more evenly dispersed across disciplines than women, but less evenly dispersed across disciplines than white men.
${ }^{4}$ As Frye notes, "Differences in power are always manifested in asymmetrical access" [32, p. 103]. Superiors can refuse access to subordinates, but those who are subordinate (in this case, junior faculty) cannot easily refuse access to their bosses (in this case, chairs, deans and upper administrators).
${ }^{5}$ This would also have the welcome effect of better enabling faculty to improve their courses.
${ }^{6}$ It might also be argued that active involvement in research makes a teacher more lively, enthusiastic, interesting, challenging, and organized. The only variable linking research to effective teaching, however, is organization. And it is plausible to suggest that good organizational skills are a source, rather than an effect, of good research [31].
${ }^{7}$ This article emphasizes the importance of scholarly publication to successful tenure and promotion outcomes. This emphasis, like the university's emphasis, is problematic for those faculty who work in the visual or performing arts. The contributions of painters, photographers, sculptors, actors, and musicians - like the contributions of women - would be better recognized by the revised criteria for tenure and promotion suggested at the end of this article.

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