Organizing Around Gender Equity

Martha S. West and John W. Curtis

The last two years have seen renewed and vigorous debate regarding the opportunities for women's advancement as faculty at American colleges and universities. Some of the recent increase in attention to this issue can be attributed to the reaction to remarks by Lawrence Summers, then president of Harvard University, in January 2005. (For example, see the statement of AAUP's Committee on Women in the Academic Profession published in the July-August 2005 issue of *Academe*.) Although the concern with equity for women faculty preceded Summers's statement by many years, in the wake of the controversy several major universities announced significant new initiatives to support women faculty. In recent months the National Academy of Sciences has issued two reports: *To Recruit and Advance: Women Students and Faculty in U.S. Science and Engineering* and *Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering*. In addition, the last two years have seen increasing attention to policies and practices designed to enable faculty to balance their career goals with family responsibilities—a challenge that has long disproportionately impacted women.

Beginning with the establishment of Committee W in 1918, continuing with the statement *On Discrimination* and collection of gender-specific faculty salary data in the late 1970s, and more recently in its *Statement of Principles on Family Responsibilities and Academic Work* (2001), the AAUP has long worked toward the goal of achieving equity in appointments and salary for women faculty. The present report represents both a continuation and an expansion of this effort. It provides data on faculty gender equity that are specific and comparable for a wide range of college and university campuses, with the goal of invigorating collaborative discussions at the local level. Our hope is that faculty will join together to review—based on these data and other locally produced information—the status of gender equity efforts on their campuses, and that they will initiate discussions with their institutional administrations on ways to make further progress.

Section I.
A National Portrait of Faculty Women

It is now thirty-four years since Congress passed Title IX in 1972, prohibiting sex discrimination in education. Yet women still find themselves struggling to be admitted to the top faculty ranks in colleges and universities. Women hold only 24 percent of full professor positions in the U.S., despite the overwhelming presence of women students on campus for the past twenty-five years. Women are obtaining doctoral degrees at record rates, but their representation in the ranks of tenured faculty remains below expectations, particularly at research universities. Women face more obstacles as faculty in higher education than they do as managers and directors in corporate America.

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The barriers for women in higher education not only raise questions of basic fairness, but place serious limitations on the success of educational institutions themselves. Colleges and universities are not taking advantage of the widest talent pool when they discriminate on the basis of gender in hiring or promoting faculty. When women are hired, they are often paid lower salaries than men of equal rank, again shortchanging both women faculty and educational institutions by discouraging women graduate students from pursuing academic careers. The nature and scope of academic research is, in turn,

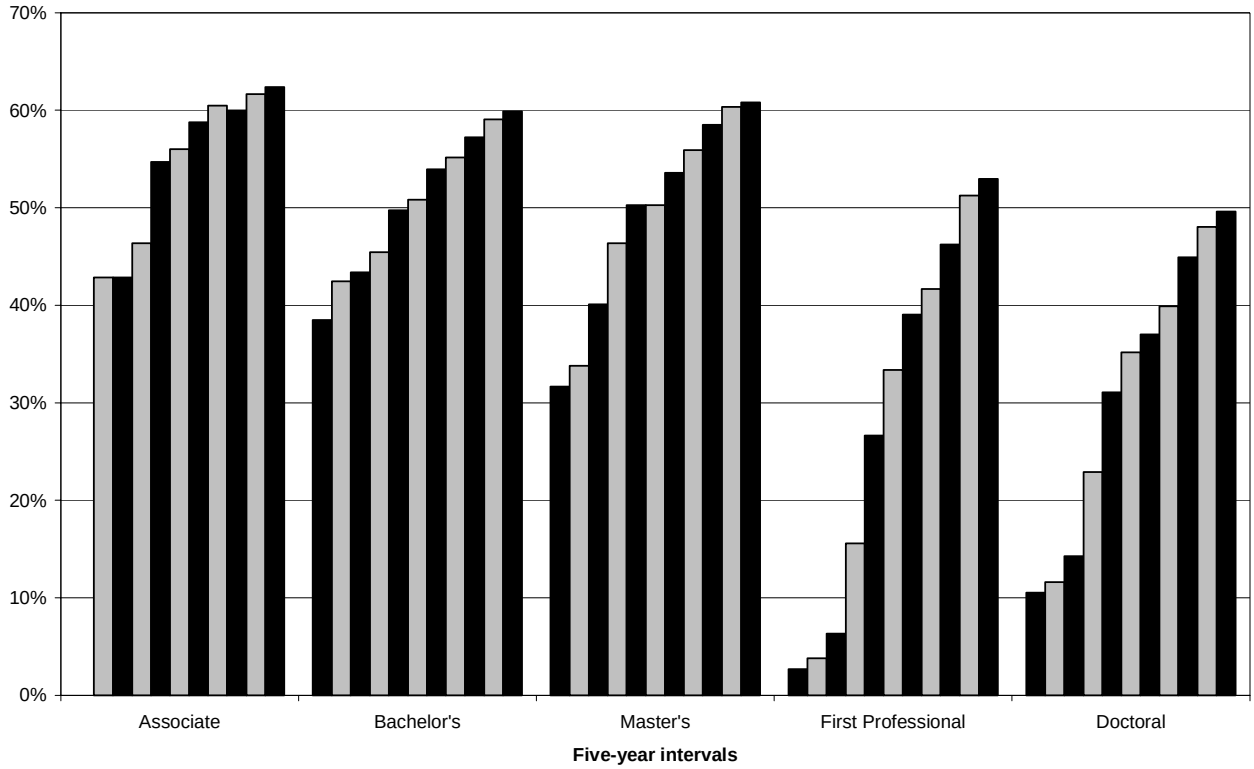
affected by the lack of gender equity. When women are missing from faculty ranks, the research questions they would raise—whether or not those questions relate to matters of gender—are not asked and the corresponding research is not undertaken. American higher education as a whole suffers because of the lack of gender equity in the faculty.

The increased participation of women in higher education as students was well underway before Title IX was enacted in 1972 (see Figure 1). Yet, with Title IX's explicit prohibition of sex discrimination in education, that date marks a good starting point to examine the rapid expansion of women's graduate enrollment in higher education in the United States. In 1972, women earned 41 percent of Master's degrees awarded by U.S. universities, 6 percent of first professional degrees, and 16 percent of doctorates. Thirty-two years later, in 2004, women earned more than half of all graduate degrees: 59 percent of Master's degrees, 49 percent of first professional degrees, and 48 percent of doctorates.[1] Among U.S. citizens, 53 percent of PhD recipients in 2004 were women.[2] The predominance of women in the student populations of American colleges and universities is so great that the American Council on Education's recent *Gender Equity in Higher Education: 2006* focuses on the "gender gap" in *male* achievement at the undergraduate level.

With this extraordinary expansion of women's enrollment in graduate programs, one would expect women's presence on university and college faculties to follow suit. Women's integration into the faculty ranks, however, has occurred much more slowly. In 1972, women made up 27 percent of all faculty in higher education.[3] By 2003, women comprised 43 percent of all faculty, 39 percent of full-time and 48 percent of part-time faculty.[4] Women occupied about 9 percent of full professor positions at four-year colleges and universities in 1972,[5] and still only 24 percent of all full professors in 2003.[6]

The AAUP has been tracking this uneven progress of women in the academy for many years and reports faculty data by gender as part of its annual compensation survey. Due to the persistence of faculty gender inequity at U.S. colleges and universities, it is time to look more deeply into the

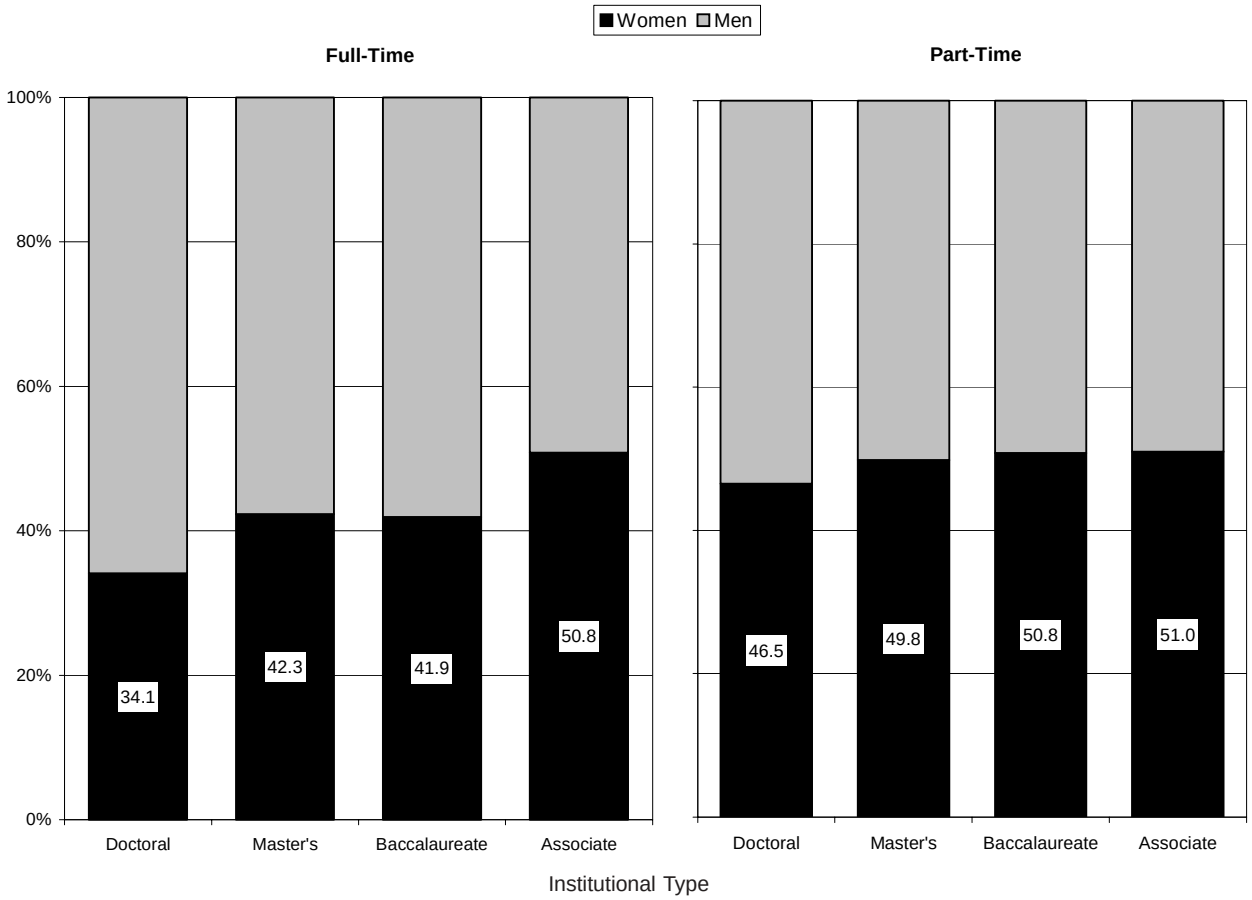
Figure 1.
Earned degrees, percent women, 1960-61 to 2010-11*



Source: US Department of Education, Digest of Education Statistics 2005 (Table 246)

*2005-06 and 2010-11 Projected

Figure 2.
Equity Indicator 1 - Faculty Employment Status by Gender and Institutional Category, 2005-06



situation women face on individual campuses and among different types of institutions. Reviewing comparative data across a large number of higher education institutions, it becomes more obvious that women's status varies greatly. Accordingly, AAUP has developed a new set of numbers, gender equity indicators, for individual colleges and universities to illustrate women's progress (or lack thereof) in pursuing academic careers. The four indicators represent different aspects of the overall status of women faculty, which at current levels amount to a series of accumulated disadvantages: Women faculty are less likely than men to hold full-time positions. Women in those full-time positions are underrepresented in tenure-track positions, and have not attained senior faculty rank (represented here by the full professor rank) at the same rates as men. At each full-time faculty rank, women earn less than men, and the accumulated disadvantages of position are exemplified by the comparison of overall average salary in the final indicator.

The next sections provide a national context for each of these indicators, followed by discussion of how to make use of the institution-specific data listed in the appendix.

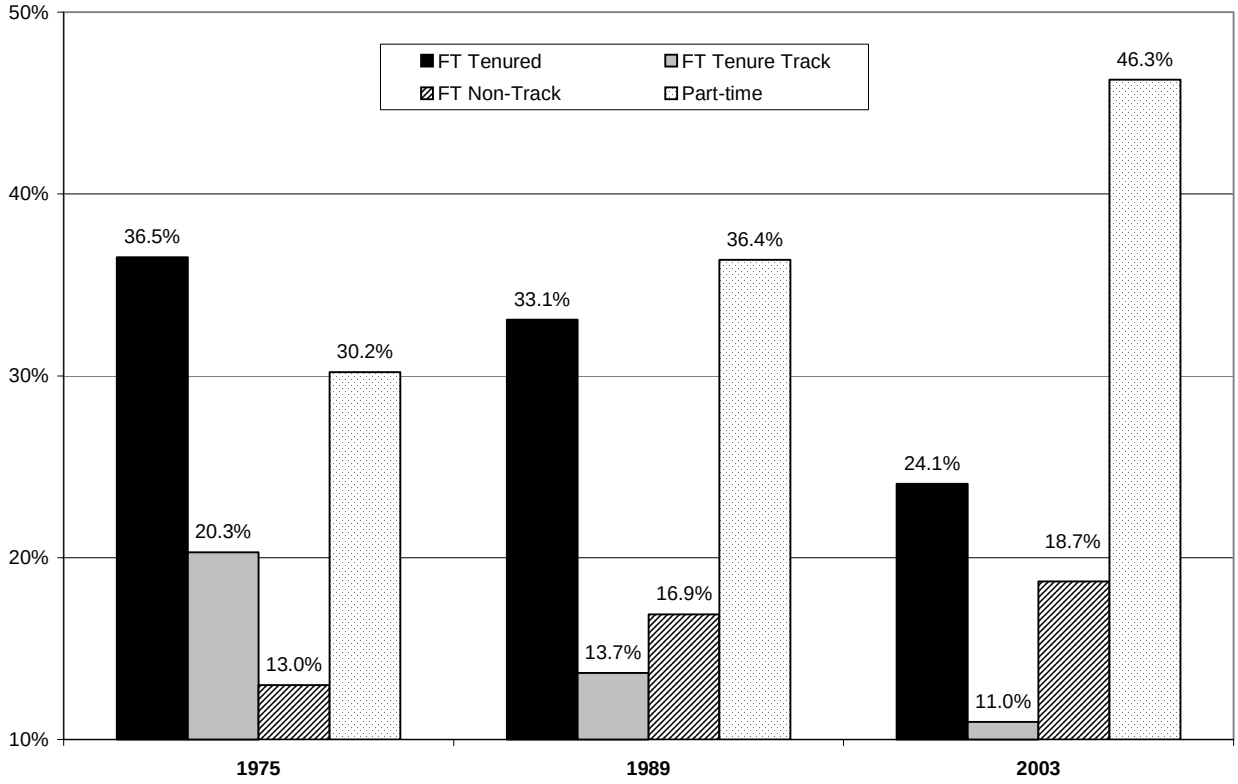
Faculty Gender Equity Indicator 1: Employment Status

The first step on the faculty career ladder is obtaining a full-time position. As noted in the AAUP's 2006 *Annual Report on the Economic Status of the Profession*, the proportion of full-time appointments among all faculty positions has been declining over the last thirty years.[7] However, throughout this period, women have more frequently held part-time positions than have men. At the national level, women constituted 39 percent and men 61 percent of full-time faculty in 2005-06.[8] Thirty years ago, women were 22 percent of full-time faculty, and ten years ago they made up 32 percent. This gradual increase in the representation of women among full-time faculty does indicate some progress, and some

observers have suggested it is just a matter of time until women faculty reach parity with men. A sophisticated recent analysis of hiring and retention trends at one research university suggests, however, that parity is unlikely to emerge without significant changes in employment patterns.[9] Based on complete data for the 1990s, the model analysis found that without any change in current hiring and retention trends, women would never make up more than 34 percent of full-time tenure-track faculty at that university—with that progress requiring 40 years to achieve. Even given an extremely optimistic hypothetical projection based on equality of hiring and retention rates between men and women, the researchers concluded that it would take *57 years* for women to reach parity with men and make up 50 percent of the full-time faculty.

The success of women in achieving full-time faculty status has differed greatly depending on institutional type. At universities that award doctorates, women have filled graduate programs as indicated above, but have not been welcomed into the faculty ranks at comparable rates. Gender Equity Indicator 1, depicted in figure 2, shows that women constituted 34 percent of all full-time faculty at doctoral institutions in 2005-06, while men made up 66 percent. Doctoral universities play a crucial role in gender equity, not only because of their status and prestige, but because they employ such a significant percentage of faculty members: 47 percent of full-time faculty teach at doctoral universities. By contrast, at colleges and universities that award primarily master's or baccalaureate degrees, women held 42 percent of full-time faculty positions compared to men's 58 percent. At associate degree-granting institutions—predominantly public community colleges—women have already reached parity, comprising 51 percent of the full-time faculty. Contrast the data on full-time faculty to that on part-time faculty. Women occupy a significantly higher percentage of part-time faculty slots than full-time positions. In 2005-06, women held 48 percent of part-

Figure 3.
Trends in Faculty Status, 1975-2003
All degree-granting institutions, national totals



Source: US Department of Education, IPEDS Fall Staff Survey

time positions, compared to 39 percent of full-time faculty slots. As figure 2 indicates, women comprise a consistent proportion of part-time faculty across institutional types, making up only a slightly lower proportion of those positions at doctoral universities.

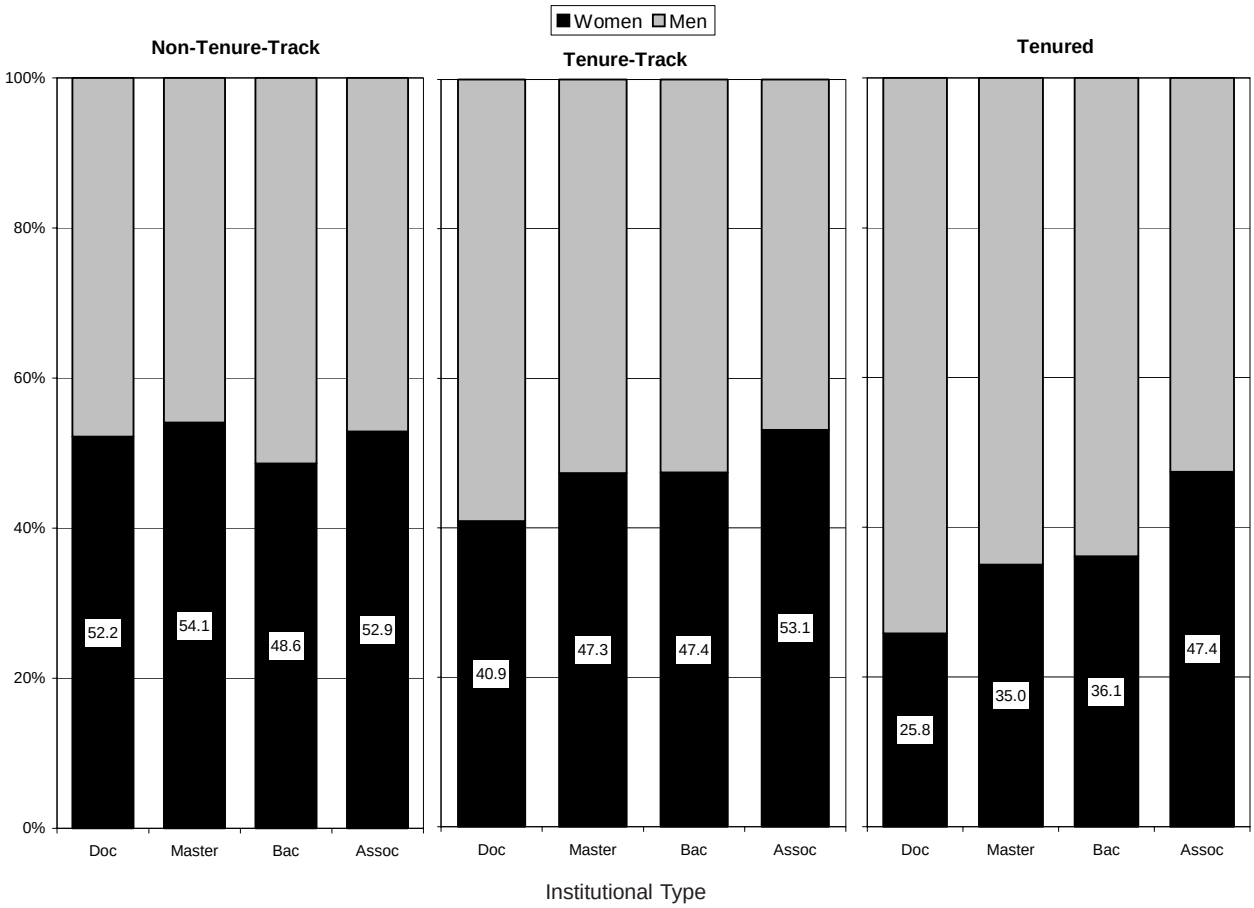
Faculty Gender Equity Indicator 2: Tenure Status

The second hurdle for women pursuing a faculty career is securing a tenure-track appointment. Figure 3, utilizing U.S. Department of Education census data, shows that alongside the growth in part-time faculty jobs, full-time non-tenure-track positions have increased over the last three decades. As Schuster and Finkelstein have documented, the majority of new full-time faculty hires since 1990 have been off the tenure track.[10] The impact of this trend has not been equal for men and women, however. Figure 4 presents Gender Equity Indicator 2, the breakdown of full-time faculty positions by tenure status and type of institution. It demonstrates that while women occupy the majority of non-tenure-track positions, they are still underrepresented among the ranks of tenured faculty.

Non-Tenure-Track Faculty

As figure 4 shows, we find a significantly higher proportion of women among non-tenure-track faculty than among tenured faculty. Most full-time non-tenure-track positions are "term" or "contract" appointments, usually extending for one to three academic years with no assurance of reappointment at the end of the contract term. Nationwide in 2005-06, women occupied 52 percent of the non-tenure track positions, and men 48 percent. Further analysis indicates that women held 57 percent of full-time instructor or lecturer positions in 2005-06; these are nearly all positions that do not lead to consideration for tenure. Looking at this phenomenon in another way, we find 30 percent of full-time women faculty in non-tenure track jobs, compared to only 18 percent

Figure 4.
Equity Indicator 2 - Tenure Status of Full-Time Faculty by Gender and Institutional Category, 2005-06



of full-time male faculty members. Women are significantly over-represented in these non-tenure-track positions, the least secure, least remunerative, and least prestigious jobs among the full-time faculty.

Among non-tenure-track faculty we do not find significant differences between types of higher education institutions. Women hold a majority of these poorly-compensated, insecure positions: 52 percent at doctoral institutions, 54 percent at master's institutions, 49 percent at baccalaureate colleges, and 53 percent at two-year colleges. As indicated in figure 3, the ranks of the non-tenure-track faculty have been expanding over the last three decades, while the ranks of the tenured and tenure-track faculty have been decreasing.

It is interesting that this nationwide phenomenon is occurring just as women are obtaining PhDs in large numbers and thereby qualifying for tenure-track faculty jobs. There is little mobility from non-track positions into tenure-track jobs. Anecdotal reports reflect the unfortunate truth: If one begins teaching in a non-track position, there is very little chance that one's application for a tenure-track job will be taken seriously on that same campus. Schuster and Finkelstein's carefully constructed analysis concludes as follows:

> The preliminary evidence suggests that *for the most part* these fixed-term, full-time appointments seem to constitute a discernibly different career track from that of traditional, tenure-eligible appointments. That is, the modal pattern discernible among current full-time faculty is one of movements *among* off-track appointments or *among* on-track appointments.[11]

Consequently, the opportunities for advancement in terms of position or salary are severely limited in a non-tenure-track appointment. That women are overrepresented in these positions indicates a continuing gender inequity not easily overcome, if at all, in the course of faculty careers.

Tenure-Track Faculty

The crucial data that reflect full-time faculty hiring patterns over the past seven or eight years are the percentages of women and men not yet tenured, but in tenure-track positions. It typically takes from six to eight years to earn tenure, so these entry-level tenure-track positions reflect relatively recent hires. At the national level among all institutions in 2005-06, women occupied 45 percent of these tenure-track positions.

As figure 4 indicates, at doctoral universities women held 41 percent of these jobs. This proportion of women in tenure-track positions can be compared to the percentage of women among recent PhD recipients, which first reached the 40 percent level in 1995-96 and was 48 percent in 2004.[12] A doctoral degree is generally a prerequisite for a tenure-track position at a doctoral university. Therefore, if universities had been hiring women at a rate equal to their availability in the PhD pool over the last five to seven years, the percentage of women in these tenure-track positions would be higher than it currently is.

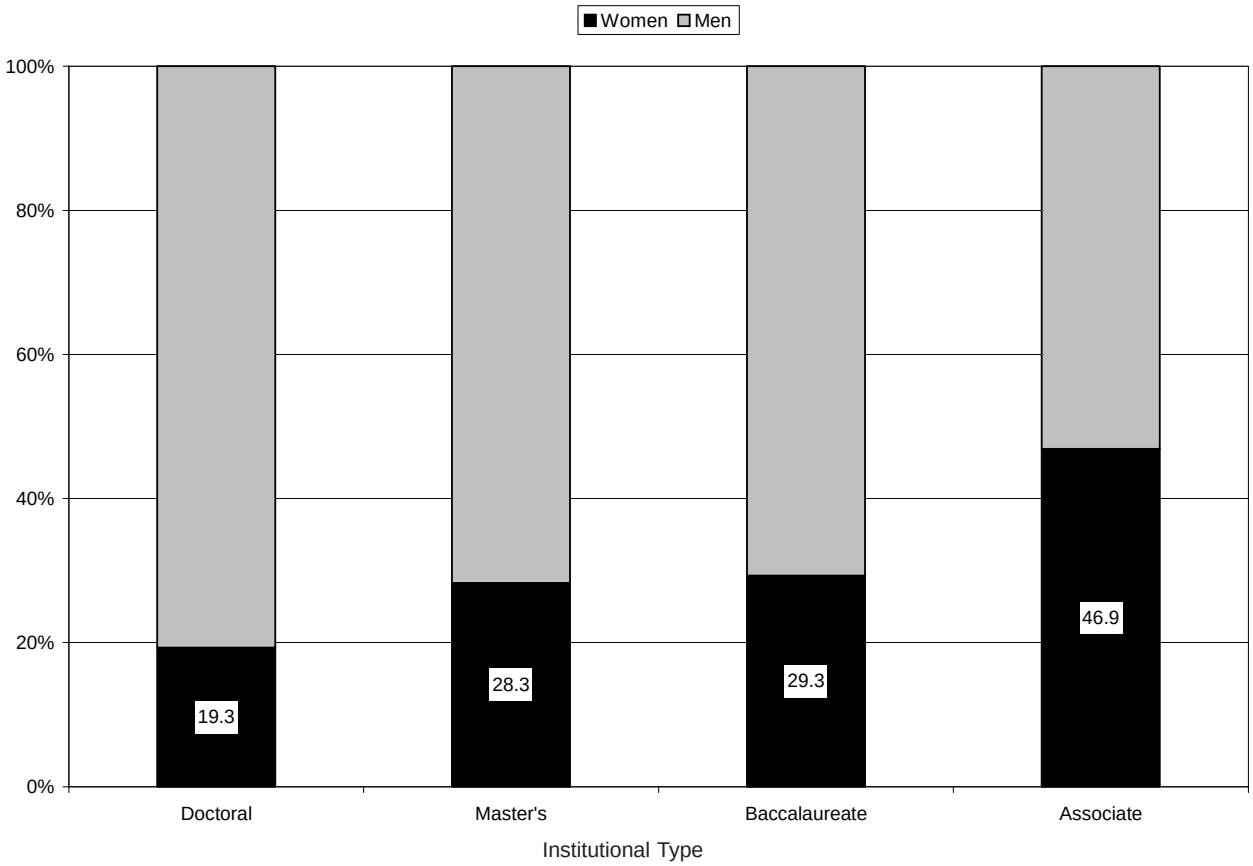
This comparison to the PhD pool may not be as relevant for community colleges as it is for doctoral universities, because a PhD is often not required to teach at an associate degree college. No doubt, this is reflected in the fact that in 2005-06 women held 53 percent of tenure-track positions at community colleges. On the other hand, the community college data may also reflect the fact that women with PhDs are not being hired at equitable rates at doctoral universities, and, instead, are finding teaching jobs at other types of higher education institutions, where they also find significantly higher teaching loads and lower salaries.

At both baccalaureate and master's degree institutions, 47 percent of tenure-track faculty are women. The hiring rates for women among tenure-track faculty at these schools reflect the rate at which women have been obtaining PhDs in the U.S. for the past ten years.

Tenured Faculty

After securing employment in a tenure-track job, one expects to achieve tenure after six or seven years at most colleges and universities, assuming adequate performance in teaching, service, and research. However, when we move from the tenure-track data to the data on tenured faculty in figure 4, we find a substantial drop in the percentage of women. This difference indicates that the tenure process represents a further inequitable hurdle for women in the academic career progression. In 2005-06, women held only 31 percent of the tenured positions, and men held 69 percent. The differences among

Figure 5.
Equity Indicator 3 - Full Professors, by Gender and Institutional Type, 2005-06



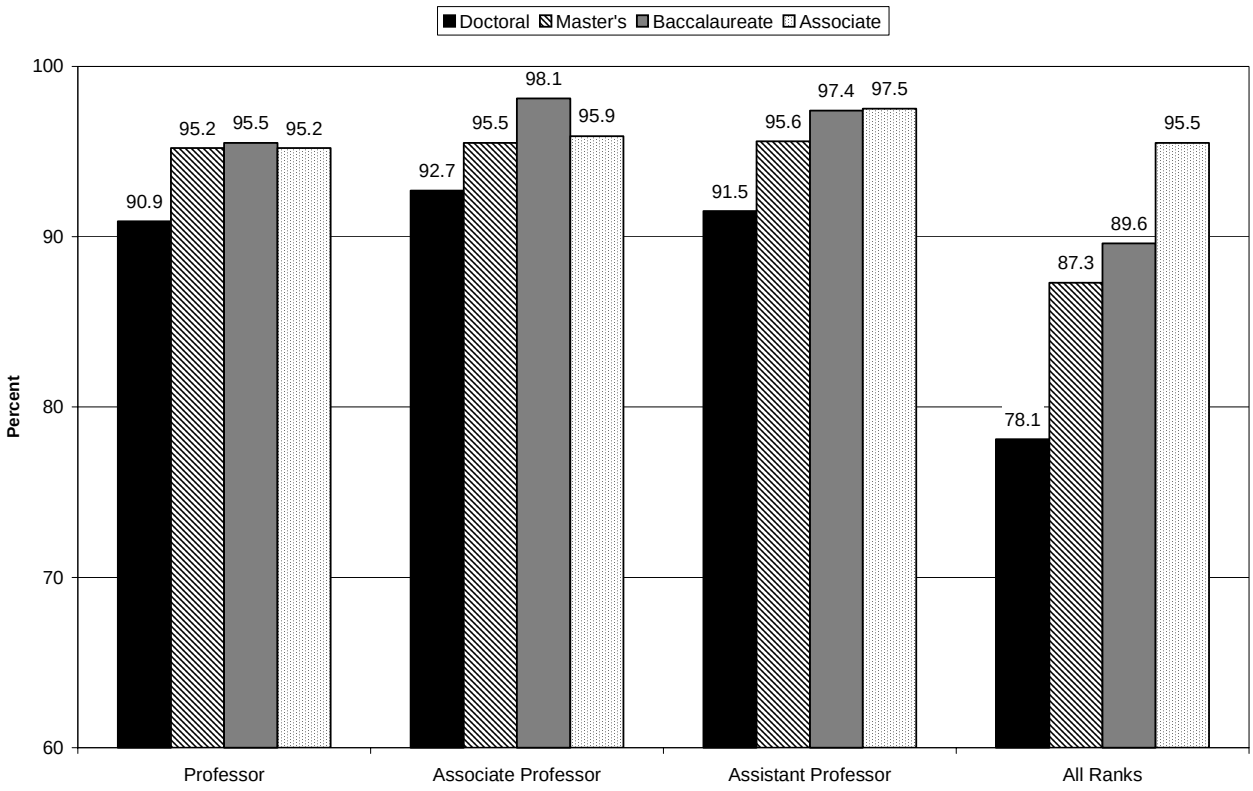
institutional types on tenure achievement are also striking. At associate degree colleges, women have nearly reached parity and are 47 percent of tenured full-time faculty. The proportions of women among tenured faculty decrease to a little more than one-third at master's and baccalaureate colleges. It is at doctoral universities that the tenure disparity is most striking, however: only one-fourth of tenured faculty there are women. This means that full-time women faculty are only half as likely as men to have tenure.

Again, it might be argued that the lower tenure achievement rates for women reflect a lag in academic employment practices that will be remedied given sufficient time. Data from the AAUP survey do not support this contention, however. Separate data by gender on tenure status of full-time positions are available beginning from 1980. At that time, 49 percent of all women full-time faculty had tenure, compared with 70 percent of men. The proportion among women reached 52 percent in 1998-99, but has fallen off to 43 percent for 2005-06 (and 61 percent among men). As tenure rates have fallen off generally, the gap between men and women has not closed. And with the number of tenured and tenure-track positions apparently now stagnating or even decreasing (see figure 3), prospects for women do not appear especially bright in the future without a significant change in hiring and tenure practices.

Faculty Gender Equity Indicator 3: Full Professor Rank

In sharp contrast to non-tenure-track positions, when we turn to the most prestigious and highest paid faculty jobs in higher education we find the lowest percentages of women. Among full professors at all institutions nationwide in 2005-06, women held 24 percent of the positions and men held 76 percent. As depicted in figure 5, Gender Equity Indicator 3 reflects differentials among categories of institutions similar to the differentials found in indicators 1 and 2: women are much closer to equality with men in achieving full professor status at community colleges

Figure 6.
Equity Indicator 4 - Full-Time Faculty, Women's Average Salary as a Percent of Men's, by Institutional Type, 2005-06



than at doctoral institutions. In 2005-06, women comprised 47 percent of full professors at community colleges and men 53 percent**,** almost at parity. By contrast, at doctoral universities the percentage of women among full professors was less than one-fourth of men's, 19 percent compared with 81 percent. Baccalaureate and master's degree institutions were in between, with 29 and 28 percent women respectively, but still with substantially lower proportions of full professor positions than at associate degree colleges.

At the full professor rank, the increase in the proportion of women has been relatively rapid over the years. Women were 10 percent of all full professors in 1974-75 and 24 percent in 2005-06.[13] However, this is a relatively rapid increase from a very low starting point. At this rate of change it does not appear that women faculty will attain equity in full professorships for many years. Thus, promotion to full professor constitutes a further point where inequities persist in the career progression of faculty women.

Faculty Gender Equity Indicator 4: Average Salary

The final Gender Equity Indicator compares average salaries of men and women by rank and across all academic ranks. In 2005-06, across all ranks and all institutions, the average salary for women faculty was 81 percent of the amount earned by men. This comparison has remained virtually unchanged since the AAUP began collecting separate salary data for women and men faculty in the late 1970s. When men and women faculty at the same rank are compared, women's relative salary is somewhat higher. Among all full professors at all types of institutions in 2005-06, women earned on average 88 percent of what men earned. For associate and assistant professors, the overall national figure for women was 93 percent. However, these numbers are actually slightly lower than they were thirty years previously, down from 90 and 96 percent respectively.

The overall salary disadvantage for women is a combination of two primary factors: women are more likely to have positions at institutions that pay lower

salaries, and they are less likely to hold senior faculty rank. Figure 6 reflects both of these aspects of salary differences for 2005-06, but also indicates that women earn lower salaries on average even when they hold the same rank as men.

In figure 6, the comparison of average salaries within rank shows that women do not reach parity with men in any of the institutional categories. Women's proportion of men's average salary is significantly lower at doctoral universities for all three ranks, while the proportions at master's, baccalaureate, and associate degree institutions are similar to one another. The differences in average salary reflected in the first three sets of columns of figure 6 may seem small. However, viewed another way, the chart indicates that women earn average salaries that are two to nine percentage points lower than men's salaries, *even when they hold the same rank*.

The accumulated salary disadvantage for women is shown most dramatically in the "All ranks" columns of figure 6. The "All ranks" columns in the chart include salaries for full-time instructors, lecturers, and unranked faculty where these are reported. Because women are overrepresented at those lower-paying ranks, the overall figures differ substantially from the figures for each of the upper three ranks. The "All ranks" figures also point to large variations between institutional types. The difference between institutions reflects two aspects of different faculty appointment structures: doctoral universities are more likely to employ faculty at the instructor and lecturer ranks, and more unranked faculty. Further, the salary differentials between ranks at doctoral universities are much larger than those at other types of institutions.

Given these differences, the variations in salary disadvantage for women between different institutional types are stark. Women have not reached overall salary parity with men in any of the institutional categories. However, the figure for 2005-06 at associate degree colleges is closest at 96 percent. At baccalaureate colleges, women earn an average of 90 percent of men's salary, and at master's degree colleges they earn 87 percent. Again, the differences between women and men are greatest at doctoral universities, where the overall national gender equity indicator is only 78 percent for 2005-06.

Gender differences in faculty salary have been subjected to numerous statistical analyses over the last three decades. Many quantitative analysts would argue that the comparison represented by Gender Equity Indicator 4 is too simplistic, because it does not take into account myriad individual differences between men and women faculty. For example, an analysis of data from the National Study of Postsecondary Faculty for fall 1998 was included in the U.S. Department of Education's *Condition of Education 2002*. Based on a multiple regression analysis, the study found that men earned 9 percent more than women, even after controlling for 13 other variables (institution type, discipline, tenure, rank, degree, age, teaching/research, publications). Toutkoushian and Conley's comprehensive review and extension of various analytical models developed during the 1990s found that the "unexplained" salary gap between male and female faculty remains at between 4 and 6 percent. In a recent article, Umbach focused on disciplinary labor markets, which are often cited as a key source of differences in salary between men and women.[14]

Each of these statistical studies finds an "unexplained" disadvantage of several percentage points in average salaries for women faculty, even after accounting for numerous individual and institutional factors. Although it is not appropriate to attribute this remaining differential to discrimination on the basis of this evidence alone, the statistical analyses clearly leave a series of questions unanswered: Why is the proportion of women faculty holding doctorates smaller than the proportion among men? Why are women less likely to obtain full-time tenure-track positions? Why are they less likely to be employed in research universities? Why do women faculty generally spend more of their time on student advising and committee service than do men? Why do positions in the disciplines in which women faculty are concentrated generally pay less? Why are women less likely than men to earn tenure and promotion to full professor? Why do they earn less on average at every rank than their male counterparts?

If we are to achieve equity for women faculty, it is necessary to confront each of these questions at the local level, and to devise more effective strategies to remove the disadvantages for women that persist even after decades of effort to remove them.

Section II. The Status of Faculty Women at Each College and University

Now it is time to compare the gender equity indicators for each college and university to the national norms. Listings of the indicators for individual institutions can be found in the Appendix. The institutional listings are grouped by category to facilitate comparisons of similar institutions. Within each institutional category, the listings are organized by state and then alphabetically within each state.

Look at the gender equity indicators for your college or university. Do they reflect the same processes as the national data? What steps can be taken on your campus to support women as they seek fuller integration into the faculty ranks? As we examine the data, we would also like to suggest strategies for change, focusing on some of the most difficult problems for women in higher education.

Hiring women into tenure-track faculty positions

Over the past 30 years, as women have obtained doctorates in increasing numbers, they have not been hired into tenure-track positions at doctoral universities at equitable rates. The situation seems to be better for women at master's and baccalaureate institutions, which generally also require the doctorate for tenure-track positions. Recent hires are indicated by the percentages of women and men in tenure-track positions who have not yet obtained tenure. In examining the data for Gender Equity Indicator 2 (tenure status) at individual doctoral institutions, we find the percentages of women among tenure-track faculty members range, for example, from highs of 63 percent women at Adelphi University, 60 percent at Loyola University of Chicago, and 59 percent at the University of Missouri-St. Louis, to lows of only 15 percent women at Cal Tech, 24 percent at MIT, 29 percent women at Brown, Duke, and the University of Chicago, 30 percent at Princeton, 32 percent at Stanford, and 34 percent at Harvard. Even among master's and baccalaureate colleges, there is a wide range of values for women as a proportion of tenure-track faculty. Where does your institution place in this range?

Why has it been difficult for women to obtain tenure-track jobs, particularly at doctoral institutions? The answers are, no doubt, complex, but we encourage interested faculty members to examine the situation on their campus and determine whether women are being steered into the non-tenure-track ranks instead of being hired as tenure-track faculty. At your college or university, are women obtaining tenure-track positions at rates comparable to their representation in the PhD pool? The cohort of recent PhD recipients has reached gender equity, 53 percent women among U.S. citizens and 48 percent of all PhDs in 2004. Is your campus hiring women into tenure-track positions at higher or lower rates than other comparable institutions? If the percentage of women among tenure-track positions at your campus is below the national figure on Gender Equity Indicator 2 for your institutional category, then we suggest that interested faculty form a committee or use an existing committee structure to examine faculty hiring on campus.

The process of hiring tenure-track faculty differs significantly from that used to fill non-tenure-track positions. For tenure-track positions, a faculty search committee is formed, applications are solicited nationwide, short lists are compiled, and candidates are invited to campus for in-depth interviews. The hiring decision is then made at the department level by the faculty collectively, which submits its recommendation to the campus for final approval. By contrast, the more informal processes used for hiring non-tenure-track positions have not presented difficult hurdles for women to cross. On many campuses, non-tenure-track jobs are informally filled by department chairs without a search, using a local pool of available candidates. Often non-tenure-track jobs are not even advertised or posted. Are women PhD recipients encouraged to take these non-tenure track positions and discouraged from seeking tenure track jobs? Do women themselves pursue non-tenure-track positions because these positions are perceived to be more flexible to accommodate family responsibilities?

To conduct a study of tenure-track faculty hires, faculty members should begin by examining national PhD data by field. As one may expect, women's percentages among PhD recipients in English or psychology have been very high, above 60 percent for the past 15-20 years. In biological science, women have received over 45 percent of PhDs for almost 15 years. But in physics, women have obtained only 17 percent of recent PhDs. National data by field are available from the Survey of Earned Doctorates

compiled each year by the National Opinion Research Center (NORC) on behalf of six federal government agencies. Most campuses have the data available locally as part of their federally required affirmative action plans. Faculty should request these data, broken down into PhD fields relevant for each department.

Once faculty have the PhD data by field, they can compare the data to each department's hiring record over the past five to ten years. If significant differences are found between the percentage of women among PhD recipients and the percentage of women among tenure-track hires, a problem may exist and further examination is warranted.

On campuses that have conducted studies of recent hire data, one often finds that the percentage of women among applicants for tenure-track faculty jobs does not match the percentage of women among PhD recipients. There seems to be a significant drop-off among women between receipt of the PhD and application for tenure-track faculty positions. One problem is the way colleges and universities identify applicants. When senior faculty call their peers at other institutions and ask for outstanding graduates to consider for faculty jobs, they often do not get a gender-balanced list of names. One department chair reported that when his colleagues made such calls, they got only men's names. When they called back, and asked specifically whether or not there were any women candidates to consider, the response was often, "oh, yes, I just didn't think of (fill in a woman's name)." They eventually ended up with an appropriate short list of both men and women candidates. So one good practice is to make sure search committees specifically solicit the names of women candidates when they make such requests. It also helps, of course, to have gender-balanced committees conducting faculty searches.

Another reason for the gap between women's representation among PhD recipients and their presence in applicant pools is women's perception that it is too difficult to pursue a tenure-track faculty career and raise children. In one study at the University of California, Davis, among graduate students in the sciences, women's interest in pursuing academic careers decreased significantly more than men's during their years in graduate school.[15] A major reason women cited for no longer being interested in academia was the difficulty of integrating family responsibilities with a tenure-track faculty position. As faculty work to adopt "stop the clock" and other family-friendly policies, many modeled on the AAUP's *Statement of Principles on Family Responsibility and Academic Work*, it is crucial that these policies be well-advertised and distributed to graduate students, so women in graduate school realize that it is possible to remain in academia while raising children.[16] The academy must make further efforts to convey to women that they no longer need to make a choice between raising children and becoming tenure-track faculty members.

The academy must make further efforts to convey to women that they no longer need to make a choice between raising children and becoming tenure-track faculty members.

Another reason that tenure-eligible hiring rates have remained below women's PhD rates is that many research universities hire a significant proportion of faculty into tenured positions as associate or full professors, not at the tenure-track entry level of assistant professor. Among faculty hired with tenure, the percentage of women falls significantly. One way to increase the proportion of women in tenure-eligible positions is to limit the number of hires with tenure. For example, at the University of California, Davis, the campus adopted a policy in 2000-01 to limit hires at the senior associate or full professor level to 20 percent of all ladder-rank (tenure-eligible) faculty appointments. Traditionally, 40 percent of new ladder-rank faculty appointments within the University of California system have been with tenure, one reason California's rates for hiring women faculty have remained relatively low. If faculty are interested in increasing the appointments of women, they need to work with administrations to limit the number of direct hires into tenured appointments.

Difficulties in Obtaining Tenure

As is evident from examining the appendix data for specific institutions, the proportion of women among tenured faculty also varies substantially. Among doctoral universities, for example, only 8 percent of tenured faculty members at the University of Missouri, Rolla are women, as are only 10 percent of tenured North Dakota State University faculty. By contrast, women comprise 43 percent of tenured faculty at the University of California, San Francisco, and 41 percent at the University of Northern Colorado and Indiana University of Pennsylvania. There is an even wider range in the proportion of tenured faculty who are women at master's degree universities and baccalaureate colleges; the majority of these faculty are women at a number of universities and colleges. Even so, women constitute only a little more than a third of tenured faculty overall at institutions in these categories.

At some schools, women who seek tenure receive it at the same rates as men; at other schools, this is not true. AAUP does not have access to tenure decision data on a national basis, but faculty should request it for their campus. One needs to ask for the numbers of both women and men who apply for tenure and then compare those to the numbers who received it. It is more difficult to get numbers for those faculty who left academia before applying for tenure. Perhaps more women than men drop out during those pre-tenure years.[17] In the absence of a longer-term longitudinal analysis, following faculty members from initial hire through tenure, it is impossible to say. Such a study should be possible, however, at the campus level.

Promoting Women to Full Professor

The relative lack of women at the full professor level is the cumulative result of multiple barriers at many points along the career path, plus the remaining historical legacy of women's earlier exclusion from graduate education prior to the enactment of Title IX in 1972. Some full professors have held their positions for decades. However, as older faculty—predominantly men—retire, historical patterns no longer explain completely women's low percentage within the full professor ranks.

The first significant barrier women must overcome on the way to a full professorship is the tenure hurdle discussed above. The second significant barrier on most campuses is the promotion from associate to full professor. Some studies indicate that women spend a longer time than men at the associate professor rank. Is this true at your institution? Are men encouraged by their colleagues to go up for promotion to full professor earlier than the norm, while women are encouraged to wait? Do women take longer than men to move to full professor because they have greater family responsibilities? As Virginia Valian discusses in her book *Why So Slow?*, the accumulation of small disadvantages over the course of an entire career may limit women's ability to progress at the same rate as men.

Unequal Salaries for Women Faculty

The gap between the average salaries of men and women among full-time faculty has remained considerable for three decades with little sign of improvement. The overall national value of 81 percent on Gender Equity Indicator 4 reflects the fact that a significantly higher percentage of women than men are found in the ranks that pay the lowest salaries. When the salaries of women in the combined assistant, associate and full professor ranks are compared to men's, women earn on average about 83 percent of what men earn. A lower percentage of women than men, however, are found in these higher-paid ranks: 78 percent of faculty women compared to 88 percent of faculty men.

AAUP has been concerned about the gap between women's and men's salaries for many years. If faculty members are interested in examining pay structures on their campuses, a useful guide to salary equity studies is *Paychecks: A Guide to Conducting Salary-Equity Studies for Higher Education Faculty*.[18] In 2002 when the most recent edition of *Paychecks* was published, among full professors women were earning 88 percent of what men earned. Among associate and assistant professors, women earned approximately 93 percent of what men earned. Those ratios still held in 2005-06. The persistent salary differentials at the assistant professor level are of great concern because most of these faculty members were hired recently, usually within the last six or seven years. Slower rates of promotion and cumulative disadvantages over time cannot generally explain the gender differences in salary among assistant professors. The fact that more women are hired in fields that pay less is part of the explanation.

Another reason is simply that women are hired at lower salaries than men, even within the same fields. Unless higher education institutions have established a centralized review of all salaries at time of appointment to find and remedy gender differentials at the beginning of academic careers, these salary inequities will continue far into the future.

The large overall differential between men's and women' salaries, however, will be eliminated only when women are hired into tenure-eligible faculty positions, instead of non-tenure-track jobs, at rates equal to men. As long as women hold 57 percent of the lecturer and instructor positions, but only 36 percent of the assistant through full professor positions, these significant differences between men and women's average salaries will remain.

Conclusion

By developing gender equity indicators for each college or university, the AAUP hopes to stimulate renewed discussion on campus concerning the status of women faculty. Many questions remain unanswered. After decades of high enrollments of women in most PhD fields, why are so few women found on the faculties of doctoral universities? Why is the percentage of full-time faculty women still only about half the percentage of men on these campuses? Clearly, the master's and baccalaureate institutions have been much more welcoming to women over the last 20 years than the research campuses. Community colleges, however, are the only category of institutions where we currently find equity between men and women in terms of total faculty composition. There women have almost reached parity with men even at the full professor rank, now 47 percent women.

At most colleges and universities there remains significant room for improvement in fully integrating women into the faculty. Salary-setting practices must be examined periodically in order to eliminate gender bias, whether it manifests itself at the department level or at the individual faculty level. More importantly, if these gender equity indicators are to improve in any meaningful way over the next decade, the rate of appointments of women into tenured or tenure-track positions must increase dramatically at research universities, to reflect women's increased representation among doctoral degree recipients.

Notes

[1] U.S. Department of Education, *Digest of Education Statistics 2005*. Table 246, figures for 1971-72 and 2003-04. Available online at http://nces.ed.gov/programs/digest/d05_tf.asp.

[2] *Digest of Education Statistics 2005*, Table 267, figures for 2003-04.

[3] The Carnegie Commission on Higher Education, *Opportunities for Women in Higher Education*, New York: McGraw-Hill, September 1973: 109, based on data from the National Education Association.

[4] *Digest of Education Statistics 2005*, Table 223.

[5] The figure (8.6 percent) is for 1971-72 from The Carnegie Commission on Higher Education, *Opportunities for Women in Higher Education*, New York: McGraw-Hill, September 1973: 111, based on data from the National Education Association. The same table gives a figure for 1959-60 of 9.9 percent, perhaps showing the effect of the declining number of women's colleges beginning in the 1960s. Another Carnegie Commission study gives a figure for all institutions in fall 1966 (9.0 percent) based on U.S. Office of Education data that is virtually identical to the 1965-66 NEA figure (8.7 percent). (Seymour E. Harris, *A Statistical Portrait of Higher Education*, New York: McGraw-Hill, 1972: 466.)

[6] *Digest of Education Statistics 2005*, Table 227.

[7] "The Devaluing of Higher Education: The Annual Report on the Economic Status of the Profession 2005-06." *Academe* (March-April 2006) 92, 2: Figure 6.

[8] Unless otherwise specified, figures in the remainder of this article are from the AAUP Faculty Compensation Survey.

[9] Robyn Marschke, Sandra Laursen, Joyce McCarl Nielsen, and Patricia Rankin. "Demographic Inertia Revisited: An Immodest Proposal to Achieve Equitable Gender Representation among Faculty in Higher Education." *Journal of Higher Education* (forthcoming).

[10] Jack H. Schuster and Martin J. Finkelstein, *The American Faculty: The Restructuring of Academic Work and Careers*. Baltimore: The Johns Hopkins University Press, 2006. Figure 7.1, p. 195.

[11] Schuster and Finkelstein, p. 222. Emphasis in original.

[12] *Digest of Education Statistics 2005*, Table 246.

[13] It should be noted that the increase has not been continuous; the proportion of women among full

professors actually declined during the first years that separate data by gender were collected in the AAUP survey, from 10.1 percent in 1974-75 to 8.2 percent in 1977-78.

[14] U.S. Department of Education, National Center for Education Statistics. *The Condition of Education 2002*. (NCES 2002-025) Washington, D.C.: 103. Robert K. Toutkoushian and Valerie Martin Conley, "Progress for Women in Academe, Yet Inequities Persist: Evidence from NSOPF:99." *Research in Higher Education* 46, no. 1 (February 2005): 1–28. Paul D. Umbach, "Gender Differences in the Academic Labor Market: An Analysis of Academic Disciplines." *Research in Higher Education* (forthcoming).

[15] Anna L. W. Sears, "Image Problems Deplete the Number of Women in Academic Applicant Pools," *Journal of Women and Minorities in Science and Engineering*, vol. 9, no. 2 (2003): 169, 172-173.

[16] For more information on family-friendly policies in academia, see: "Balancing Faculty Careers and Family Work," special issue of *Academe* (November-December 2004); John W. Curtis (ed.) *The Challenge of Balancing Faculty Careers and Family Work*, New Directions for Higher Education No. 130, Summer 2005, San Francisco: Jossey-Bass; Center for the Education of Women, University of Michigan, *Family-Friendly Policies in Higher Education: Where Do We Stand?* (2005); and Gilia C. Smith and Jean A. Waltman, *Designing and Implementing Family-Friendly Policies in Higher Education*, Center for the Education of Women, University of Michigan, 2006. A presentation is also available for download from the AAUP Web site.

[17] Some evidence on this issue is discussed in Mary Ann Mason and Marc Goulden, "Marriage and Baby Blues: Redefining Gender Equity in the Academy." *The Annals of the American Academy of Political and Social Science*, 596 (November 2004): 86-103.

[18] The second edition of *Paychecks* was published by the AAUP in 2002. Its principal author is Lois Haignere, and it is available for purchase through the AAUP Web site.