

Employment

MIT Completes Ground-Breaking Studies on Status of Women Faculty

MIT News, March 18, 2002

A Breakthrough for MIT and Science-Five Years after Conceding Rampant Sexism, MIT Has a New President, Susan Hockfield

Business Week Online, October 4, 2004

Despite Gain in Degrees, Women Lag in Tenure in 2 Main Fields

New York Times, January 15, 2004

9 University Presidents Issue Statement on Gender Equity

Inside Higher Ed, December 7, 2005

Summers' Remarks on Women Draw Fire

Boston Globe, January 17, 2005

High Court Supports Title IX Protection: Law Now Covers Whistle-Blowers

Washington Post, March 30, 2005

Harvard Board Names First Woman President—Drew Gilpin Faust Ends Lawrence Summers' Stormy 5-Year Tenure

Associated Press, February 11, 2007

This set of headlines about employment in education from the last five years highlights the story of women's and girls' progress: several advances alongside persistent stalled progress. In 2004, Dr. Donna Nelson, a researcher and chemistry professor from the University of Oklahoma, published "A National Analysis of Diversity in Science and Engineering Faculties at Research Universities," which demonstrated the tremendous under-representation of many minority groups, including women, on science and engineering faculties.¹²⁵ Dr. Nelson found that while women are earning doctorates in science and engineering in increasing numbers, their increased educational attainments are not reflected in the tenured or tenure-track positions of the nation's top 50 research universities. For instance, 20.5% of the doctorates awarded in computer sciences went to women, but women held only 10.8% of the assistant professorships in the field.¹²⁶ On the positive side, only two years after publishing its own report documenting systemic sex discrimination against female faculty,¹²⁷ in 2004 the Massachusetts Institute of Technology (MIT) appointed its first woman president, Susan Hockfield.¹²⁸

In January 2005, Harvard University President Lawrence Summers set off a firestorm when he remarked during a speech that women may not have the same innate or natural ability as men in some fields, which might be one reason fewer women succeed in science and math careers. President Summers also questioned how much of a role discrimination versus personal choice plays in the dearth of female professors in science and engineering at elite universities.¹²⁹ His comments catalyzed both men and women to speak up for

the reforms needed to promote gender equity in the employment of women in higher education. President Summers resigned in the wake of the outcry his remarks caused, and in February 2007, Harvard named its first woman president, Drew Gilpin Faust.¹³⁰

A little over a year before Harvard's historic action, in December 2005, the presidents, chancellors, provosts and 25 women professors of nine top research universities came together to initiate a dialogue on equitable treatment of women faculty in science and engineering. The attendees—who represented MIT, the California Institute of Technology, the University of Michigan, Princeton, Stanford, Yale, the University of California at Berkeley, Harvard and the University of Pennsylvania—agreed that institutions of higher education have an obligation to recognize the barriers to progress that still exist for female academics, such as an academic culture that does not support family commitments, and to fully develop and utilize all the creative talent available, both for themselves and for the nation. They agreed to analyze the salaries and the proportion of other university resources provided to women faculty, to work toward a faculty that reflects the diversity of the student body, and to reconvene a year later to share their specific steps for achieving these objectives.¹³¹

Title IX and its Link to Employment

While Title VII of the Civil Rights Act of 1964 bars employment discrimination on the basis of sex, it did not originally cover educational institutions. The rampant sex discrimination in employment encountered by Bernice San-

**BERNICE SANDLER:
GODMOTHER OF TITLE IX
AND CHAMPION OF EQUITY IN
EDUCATION EMPLOYMENT**

“Too strong for a woman.”

When Dr. Bernice Sandler heard these five words used to describe why she was passed up for a teaching position at a university, she could never have guessed the changes that they would bring to her life and the lives of women and girls across the United States.

Dr. Sandler was dubbed the “godmother of Title IX” by the New York Times because her research, leadership and persistence in exposing discrimination against women in higher education—in hiring and in the salary and other benefits they received if they were hired—resulted in the enactment of Title IX of the Education Amendments of 1972.

Shortly after her own encounter with discrimination in the late 1960s, Dr. Sandler became Chair of the Action Committee for Federal Contract Compliance in the Women's Equity Action League (WEAL). She realized that even though no federal laws prohibited sex discrimination in education, a federal Executive Order prohibiting contractor discrimination in employment could be used to combat sex discrimination in colleges and universities. In 1970 and 1971, Dr. Sandler filed charges of sex discrimination against more than 250 such institutions under this Executive Order.

Dr. Sandler also worked with the late Congresswomen Patsy Mink (D-HI) and Edith Green (D-OR) to enact a statutory prohibition against sex discrimination in educational institutions.¹³² Supported by legislators from both sides of the aisle and both houses of Congress, Title IX of the Education Amendments of 1972 went from committee hearings to enacted law in a time span of about two years.

dler and other educational advocates in the late sixties became the catalyst for the amendment of Title VII to cover educational employees and the passage of Title IX.

As part of its broad protections, Title IX bars sex discrimination in employment in education programs or activities receiving Federal financial assistance.¹³³ The Title IX

regulations detail that the prohibition on sex discrimination in employment encompasses, but is not limited to, recruitment, advertising, hiring, upgrading, tenure, firing, rates of pay, fringe benefits, leave for pregnancy and childbirth, and participation in employer-sponsored activities.¹³⁴

In the last five years, some progress has been made to strengthen the employment protections in Title IX. In March 2005, for example, the US Supreme Court confirmed that Title IX prohibits retaliation against those who protest against sex discrimination. In *Jackson v. Birmingham Board of Education*, it upheld the right to sue of a girl's high school basketball coach, Roderick Jackson, who was fired from his coaching position because he complained about the inequitable treatment of his team. The Court recognized that protection for those who complain about discrimination is integral to the enforcement of Title IX, and that protecting teachers and coaches from retaliation is critical because they are often in the best position to identify discrimination and bring it to the attention of administrators charged with oversight of Title IX policy.¹³⁵

Substantial Gaps Remain

In spite of the legal protections available, thirty-five years after the enactment of Title IX, substantial sex-based disparities in educational employment remain:

- Women continue to occupy jobs at the lower rungs of educational institutions. They comprise 79% of the public school teachers in the United States but are only 44% of the principals;¹³⁶
- Women are 49% of all part-time academic employees at the college level, but hold only 39% of full-time academic jobs;¹³⁷
- The salaries of women K-12 teachers in 1973 were 84% of male teachers' salaries.¹³⁸ Similar data in 2006 shows that women teachers now earn closer to 90% of what their male peers earn. This discrepancy in female and male teacher earnings is smaller than the national average for all working women of 57% in 1973 and 77% in 2006. (See Table II on p. 31.)
- In institutions of higher education, overall wages for women faculty have remained at approximately 81% of men's earnings since the late 1970s, when salary data was first collected.¹³⁹

- Only 20 of the 50 state superintendent positions, the highest position of leadership in state education offices, are held by women.¹⁴⁰
- Only one in four college presidents is female. When looking at four-year institutions, excluding two-year community and junior colleges, women make up only one in five heads of institutions.¹⁴¹

Women on the Faculties of Colleges and Universities

In the early 1970s, women made up about 18% of the faculties of all universities and colleges, and were employed predominantly in women’s colleges and other postsecondary schools that served primarily women. In 2006, according to a report of the American Association of University Professionals (AAUP), more than twice as many women are now on faculties (39%), but there is great variance in professional level by the kind of institution.¹⁴²

faculty. Non-tenure track and part time positions have lower pay, few if any benefits and may involve irregular working hours.¹⁴³

While the number of women in full professorships has increased 2.4 times since the first data were collected, that large increase is due to the low starting point—women are still largely absent not only in the premier universities but also in the highest ranks of the teaching profession.

Another measure of women’s progress toward equity in higher education is the acceptance for tenure track positions or achievement of tenure. Once again, this varies with the prestige of the institution. For all colleges and universities, forty-five percent of those on the tenure track are women and 53% of non-tenure track faculty members are women. Universities granting doctoral degrees have the lowest number of female tenured faculty (26%) as well as the lowest percentage of women on the tenure track (41%). Colleges granting Associate degrees had the highest proportion of women (47%) in their tenured faculty, and on the tenure-track (53%).

Table I. Percentage of Women Teaching in Higher Education

Status	1970	2005-06
Full Professors	8.7%	26.7%
Associate Professors	15.1%	40.5%
Assistant Professors	19.4%	47.5%
Instructors	32.5%	54.8%

Source: US National Higher Education Stats from the US Department of Education and Title IX @ 30 Report Card on Gender Equity a report from the NCWGE (National Coalition for Women and Girls in Education) June 2002.

Women have moved closer to reaching equity at less prestigious institutions, but they are still underrepresented at the most prestigious and competitive levels of higher education. In universities that grant doctorates, only 34% of the faculty are women. At institutions that grant Masters and Bachelors Degrees, women comprise 42% of the faculty, while at two-year colleges that grant Associate Degrees, they have reached 51%. But when the percentage of *full-time* women on the faculty is examined, those numbers decrease to 47% at two-year colleges and only 19% at universities granting doctorates. Women make up 39% of all faculty, but 49% of all part-time

Pay parity as a measure of gender equality in higher education shows how much work remains to be done to achieve equity. AAUP finds that the overall average salary of faculty women has stood at only 81% of that of men since it started collecting the data in the late 1970s. For all women who have reached the status of full professor, the average salary is 88% of parity with their male colleagues. For all women faculty who reached assistant and associate professorships, the salary moves toward 93% of parity with their male counterparts but is actually less for assistant professors than 30 years ago, when it was 96%.

If the salary differentials are examined across the type of higher education institution, the inequity is intensified. No one group of women faculty has reached salary equity, though at four and two year colleges, they earn about 90% and 96% of their male faculty counterparts respectively. The major contributing factor to the salary disparity is that women are more likely to have the non-ranked or non-tenure track positions in the educational institutions. Dramatic increases in the number of non-tenured women instructors and lecturers over the last ten years (59% and 102% respectively) point to a diminution of both earning ability and permanence for women in academia.¹⁴⁴

Women in the “Hard” Sciences

There are very few full professors in engineering and science who are women; the percentage of full professors who are female in these fields ranges from 3% to 15%, even though the percentage of doctoral degrees awarded to women is much higher.¹⁴⁵ While there has been a steady increase of about 6% per year in the number of women earning doctorates in the “hard” sciences between 1993 and 2001, there is a not a corresponding increase in the number of women hired on to the faculties. It is not surprising that search committees report that women do not apply, because recent female PhDs state that they have earned their degrees in an environment that is hostile to women, “and have decided they don’t want any more of it.”¹⁴⁶ After graduating, these women take other jobs within their fields that are perceived to be friendlier to them. In mathematics, where women graduate with almost half of the bachelor’s degrees, they comprise less than 10% of the teaching faculty in the subject.¹⁴⁷ Women with the same credentials as men tend to be hired into entry-level academic positions of Assistant Professor and Associate Professor at lower rates, and face greater challenges to achieving tenure. In addition, very few women are in the ranks of Full Professor, due to a small pipeline in the past and persistently high rates of attrition. Therefore women in STEM disciplines are concentrated at these lower academic ranks making it difficult for them to reshape or change the culture of their departments and advance professionally.¹⁴⁸ (See the chapter on STEM for more on the progress of women and girls in these fields.)

A National Academy of Sciences study further explores the issues that impede women’s progress in academic careers in STEM fields. The report, entitled *Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering*, points out that “both bias and structural barriers built into academic institutions and the occupation of professor limit

many women’s ability to be hired and promoted.”¹⁴⁹ The report notes that women faculty are slower to gain promotion than men, are less likely to reach the highest academic rank, and have lower salaries and are awarded less grant money than their male colleagues. In fact, as recently as the period from 2001 to 2003, female grant applicants received only 63% as much funding as male applicants at the National Institutes of Health (NIH).¹⁵⁰

Evidence of sex discrimination in academia in areas other than compensation, such as access to grants, leave policies and laboratory space, is also compelling. A professor of molecular biology at the Massachusetts Institute of Technology (MIT), Nancy Hopkins, said that she entered science “convinced that civil rights laws had eliminated gender discrimination from the workplace.”¹⁵¹ It was not until she asked for, and was denied, an extra 200 square feet of lab space that she realized that she was wrong. When her request was denied, she got down on her hands and knees with a tape measure to see just how much smaller her lab space was than that of her male counterparts. She learned that she in fact had 1,500 fewer square feet.¹⁵² Institutions are just beginning to address these kinds of inequities.¹⁵³

Women in Administration

Women administrators throughout the educational systems in the United States are still a rarity. Principals in three out of five elementary and secondary schools are male.¹⁵⁴ According to a study by the American Association for School Administrators (AASA), of the 13,728 school districts in the US, less than one in five (18%) were led by women in 2003.¹⁵⁵ The AASA report observes several reasons for this paucity.¹⁵⁶ Women may face discrimination by school boards who do not consider them to be strong candidates because they are perceived as incapable of handling finances and major system-wide decisions. Perhaps because of this discrimination, women generally enter the teaching profession to be teachers, not administrators. If they did not decide as early in their careers as men to take the track that leads to becoming a superintendent, they are not in positions that lead up the chain, such as assistant principal or department chair. Only 10% of the women in education doctoral programs elect to earn the superintendent credential. In addition, women may have family responsibilities that limit their options in ways different from those of men. Moreover, the low numbers become self-perpetuating: because there are fewer women administrators, women lack a support network or mentors of their own gender to guide them.

Table II. Percentage of Men's Pay Earned by Women Teachers

Occupation	2000	2001	2002	2003	2004	2005	2006
All Education, Training and Library occupations	75.1 (74.6)*	79.1 (74.0)	77.5 (74.2)	78.3 (73.8)	76.3 (73.4)	78.4 (73.8)	78.7 (74.2)
Elementary and middle School teachers	83.6 (82.0)	96.6 (81.1)	89.7 (81.6)	89.8 (81.7)	84.6 (81.3)	89.4 (82.2)	89.6 (82.2)
Secondary school teachers	87.6 (60.1)	89.4 (58.0)	92.0 (57.4)	91.3 (55.2)	86.3 (55.3)	89.3 (56.8)	93.7 (56.0)
Postsecondary teachers	79.8 (44.9)	76.7 (43.5)	77.6 (44.3)	79.0 (44.9)	76.2 (46.0)	78.8 (44.4)	74.5 (46.3)

Data Source: U.S. Department of Labor, Bureau of Labor Statistics and US Census Bureau

(*) The number in parentheses is the percentage of women in the job level.

Wage Gaps for Women in K-12 Schools

Women educators in the elementary, middle and secondary educational fields are also paid less than their male counterparts, although, like women teaching in colleges and universities, they have come closer to parity in salaries than some other working women. According to the data from the Bureau of Labor Statistics and the U.S. Census' Current Population Survey, inequities in salaries for women educators at those levels are improving, but they are still present.¹⁵⁷

As shown in Table II, for women in education, training and library occupations, the differential in salary has gone from 75.1% to 78.7% of men's salaries from 2000 to 2006. Women who are primary and middle school teachers (grades 1–8) showed an increase from 83.6% to 89.6%, while those in secondary school have moved from 87.6% of men's earnings to 93.7% in the same six-year span. Some of this pay increase reflects the growing demand for teachers, as a result of the declining numbers of women and men in the field. But post secondary teachers, including college and university professors, career and technical instructors and other professionals working with students, have actually lost ground—women have gone from 79.8% of men's pay in 2000 to 74.5% in 2006.

Conclusion

The beginning of this chapter quotes headlines that we have seen in the last five years. In the next five years, we

would like to see “Women achieve parity in tenure track positions at American universities,” particularly at the universities that are considered more prestigious. The work begun by the consortium of universities in 2005 must continue to ensure that this goal is achieved, including by making the tenure track more family friendly and allowing time off for parenting.

Another good headline would be “Elementary, Secondary and Higher Education Title IX Coordinators Form Caucus to Study Remedies for Pay Inequity.” First, all those Title IX coordinators would have to be appointed—and know that they were appointed. Then, the coordinators, utilizing the mandate of Title IX, could look for the reasons for the inequities and recommend strategies to close the pay gaps. In order to overcome the problems we find among faculty in all institutions, however, pay gaps will also need to be addressed in the larger society. Currently, several bills have been introduced in the U.S. Congress that will help to ensure equal pay for all Americans. The Paycheck Fairness Act would help strengthen the enforcement of the Equal Pay Act of 1963, while the Fair Pay Act would establish equal pay for equivalent work. The Fair Pay Restoration Act would make it easier to bring pay discrimination cases under the general employment discrimination law, Title VII of the Civil Rights Act of 1964. The new legislation, along with better enforcement of Title IX's protections for employees, would bring continued advancement for pay equity among teachers.

NCWGE RECOMMENDATIONS

CONGRESS

- Congress should enact the Paycheck Fairness Act and the Fair Pay Act to ensure equity in the salaries of education employees at all levels from pre-K through graduate schools.
- Congress should enact the Fair Pay Restoration Act to make it more feasible for employees to file pay discrimination cases.

ADMINISTRATIVE AGENCIES

- The Department of Education should mandate the collection of employment data from elementary and secondary schools and within districts to measure gender equity with regard to pay rates, promotional opportunities and educational benefits. It should require educational institutions to ensure that they are complying with the Equal Pay Act of 1963.
- OCR should enforce the Title IX requirement that each institution receiving federal education funds have a coordinator to ensure proper implementation of gender equity requirements.
- OCR should undertake compliance reviews to evaluate barriers to women's advancement within the ranks of academic employment.

EDUCATION PROGRAMS AND ACTIVITIES

- Educational institutions and hiring committees should develop programs to monitor the selection of candidates to promote a wide range of diversity (gender, ethnicity, race, age, sexual orientation, etc.) in tenure track positions at all types of higher education institutions in the United States.
- Educational institutions should take steps to ensure equal treatment of all candidates for hiring. In addition, they should take proactive steps, such as training and working with search committees and personnel departments, in order to enhance diversity at all faculty and staff levels. This should include strategies such as using exit committees to interview faculty and staff who leave the institutions in order to gather information about the climate for women and outstanding issues about which the institution should be aware.
- Educational institutions should pay equitable salaries to all employees.
- Schools at all levels should continue and expand programs to attract women into career fields relying on science, technology, engineering and mathematics, with a special emphasis on teaching and mentoring.
- Graduate schools of education should encourage women to consider preparing themselves for administrative jobs.