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Advancing Women In Leadership

Teaching Under a Glass Ceiling: A Study of Gender Equity in Federal Education Career Fields

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BAKER, GRAHAM, WILLIAMS, SPRING, 2003

One optimistic view would suggest that this snapshot of the 1990s documents a stage in women's inexorable journey toward gender equity at work. But those with less rosy perspectives can find ample room for concern.

Consider this picture: You are on the ground floor of a building, one of those modern palaces where balconied floors surround a central atrium reaching all the way to the roof. As you gaze upward, you can see fifteen floors of the building, all containing the expected level of activity: people are walking, alone and in groups, glass elevators are gliding up and down, a few people lean on the balcony railings, admiring the beauty of the architecture.

As you continue to watch the people above, you begin to discern a pattern. On the second and third floors, there is a mix of people, young and old, black and white, male and female. But as your focus moves higher, that all begins to change. By the seventh and eighth floors, the people are considerably more homogeneous -- mostly white, and mostly male. On the uppermost floors, minorities and women have pretty much vanished, and even those riding the glass elevators to the rarified air of the top floors are nearly all white, and nearly all men.

How you feel about this little vignette depends a great deal upon your own gender. As a male, this scene might not seem surprising to you at all: it is in fact the norm in many places, the way things have always been. But if you are a woman, this same scene can mean something very different. True, it may be the way things have always been, but it's not the way things need to be in the future.

What is this barrier, this invisible mechanism that seems to make the upper floors an all-male preserve? This article will look at the nature of gender discrimination in general, and will focus on the status of federally-employed women in education career fields.

A Barrier Invisible and Impenetrable

Occasionally, a newly-introduced term resonates in such a way that it quickly becomes part of everyday language. The words of two Wall Street Journal reporters, Carol Hymowitz and Timothy D. Schellhardt, had such an impact in a 1986 article:

Even those few women who rose steadily through the ranks eventually crashed into an invisible barrier. The executive suite seemed within their grasp, but they just couldn't break through the glass ceiling. (p. 1)

Thus the term "glass ceiling" came to enter the language, and within five years it had entered the law as well. The Civil Rights Act of 1991 focused on gender discrimination, establishing the U.S. Federal Glass Ceiling Commission (FGCC). The charter of the FGCC was to identify the causes of gender discrimination, and to make recommendations to eliminate it. From 1991 to 1995, the FGCC examined employment conditions in both private and public sectors, concluding that gender inequity existed in both spheres. The federal government was certainly not immune. For example, in 1990, the year prior to the establishment of the Commission, only 6.2% of federally employed women were at or above the level of middle management (GS-13 and above). Yet men were more than four times more likely to reach those upper levels: nearly 28% of federally-employed males were in that GS-13 and above category (FGCC, 1995, p. 35).

This requires some explanation. Most of the 1.7 million civilian federal white collar employees are paid based on what is known as the "General Schedule" (GS). This is made up of fifteen grade levels, from the lowest (GS-1) to the highest (GS-15). Within each grade are ten "steps," incremental pay increases based largely (though not completely) on longevity (5USC, § 5332). Above GS-15, special pay plans exist for the highest levels of leadership, e.g., the Senior Executive Service, Senior Diplomatic Service. As a rough comparison, a GS-12 is comparable to an Army or Air Force captain, and a GS-15 is equivalent to a colonel. The highest levels of civilian leadership (above GS-15) can be thought of as equivalent to generals and admirals in the military.

In 1991, the same year the FGCC was chartered, the average GS grade for federally-employed women was 7.50, and the median grade was GS-7. For men, the average was 10.38, and their median grade was GS-11. This disparity was reflected in average salary: in 1991, the average federally-employed woman earned \$28,184, while the average for men was \$40,926 (U.S. Department of Commerce [USDC], 1991, p. 9).

The Federal Glass Ceiling Commission completed its work with the release of a

report in 1995. That report, entitled, "A Solid Investment: Making Full Use of the Nation's Human Capital," called on both the private sector and government to take action to reduce and ultimately eliminate the effects of the glass ceiling. The report urged the federal government to focus on two areas: first was the gathering and dissemination of national statistics to identify problem areas and to track progress. Equally important, the FGCC urged government at all levels to "lead by example," tearing down its own barriers to the career success of minorities and women (FGCC, 1995, p. 4).

Education Career Fields Within the Federal Government

There are 446 white collar career fields within the federal government. Of those, eleven fall within what the government calls the "education group," including "positions which involve administering, managing, supervising, performing, or supporting education or training . . ." (U.S. Office of Personnel Management [OPM], Handbook, 1999, pp. 76-77). In 1991, the government had 19,902 employees classed as "General Schedule and related" employees in the education group, also referred to as GS-1700 (USDC, 1991, p. 76). Of those, 9,230 (46.4%) were women. The Department of Defense (DoD) was by far the biggest user of education group employees: More than 77% of the total education work force belonged to DoD. The Department of the Interior was the second most significant employer, with about 11%. All other federal agencies lagged far behind in numbers of educators employed (USDC, 1991, pp. 126-127).

The government's educational specialists in 1991 were spread among 11 career series. Most were classified as "professionals," the highest category of federal white collar workers. These people teach or manage teachers in various settings, including vocational training, vocational rehabilitation, public health education, and education research. Typical lower-echelon education positions include "latch key" specialists, child care providers, education technicians, and entry-level teachers and guidance counselors. At more senior levels, education-related jobs typically require higher levels of training, and tend to be supervisory in nature. For example, child care directors, education services officers, curriculum specialists, and training administrators would fall into this category.

Review of Literature

The existence of a glass ceiling exists in education settings outside the federal government is well established. Inman (1998) noted that the glass ceiling hinders women trying to move beyond mid-level faculty and administrative positions. In comparison with male faculty, the glass ceiling further contributes to both the relative career brevity and lower productivity of female faculty members (Bain, 2000; Chaffings, 1995). Data shows that women in academia suffer disparities with respect to men by almost every indicator of professional status, including rank, salary, tenure, job satisfaction, and working conditions (Glazer-Raymo, 1999). Women's wages and advancement are also affected by their tendency to choose less lucrative occupations, assume a greater share of domestic responsibilities, and exit the workforce for family reasons at higher rates than men (Hersch & Stratton, 2002; Kim & Polacheck, 1994; Palomba & Palomba, 1982).

Other statistics on women educators beneath the glass ceiling are significant. For example, while 42% of new entrants to medical school are women, only 5% of department heads and only 3% of medical school deans are female. Men in educational settings receive advantages in terms of office space, grant support, protected time for research and other career-enhancing benefits, compared to their female peers (Tesch, Wood, Helwig, & Nattinger, 1995). Tesch et al. attributed these disparities to bias, poor negotiation ability, and underdeveloped networking skills on the part of women. Coleman (1998) confirmed these ideas, identifying the most significant barriers to women in education, in order of importance: Exclusion from "good ol' boys" networks; employers' negative attitude toward women; and lack of professional networking.

While these studies have targeted non-federally employed educators, there is reason to believe that similar conditions exist in the federal workforce. While the glass ceiling may be itself invisible, its effects are not. If such a barrier exists within the federal government, one would expect to find women disproportionately clustered on lower rungs of the career ladder, with incomes correspondingly lower than those of their male counterparts. However, if the progress urged by the Civil Rights Act of 1991 and the Federal Glass Ceiling Commission has in fact become a reality, we would expect to see progress through the decade of the 1990s, in terms of both pay and career success.

A Retrospective: The Federal Education Field in 1991

To best evaluate the extent of progress made in cracking the glass ceiling, we can start by examining the state of the education career fields in the early 1990s. Of the government's 1.7 million white-collar employees in 1991, about 841,000 (or 49.1%) were women. In the field of education, we have seen that the overall proportion of women was similar. In 1991, 46.4% of General Schedule-and-related education employees were women (USDC, 1991, pp. 2, 76).

One significant measure of gender equity is salary. In 1991, male federal employees in education made substantially more, in the aggregate, than did their female counterparts. The average salary for federally-employed men in education was \$38,000 in 1991; for women, \$29,800. Thus, the average woman educator earned only about 78.4% of the salary earned by the average male in the field (USDC, 1991, p. 38).

Since pay scales in government do not vary based on gender, one must look elsewhere for the causes of this substantial disparity. Some likely causes of this earning gap are rank and seniority. With such a significant gender-based difference in earnings, one would expect to find that the education field was, in 1991, characterized by disproportionate numbers of men at its upper levels, with women overrepresented in the lower ranks. Note in [Figure 1](#) that compared to their overall representation of 46.4% in the General Schedule education workforce, women were overrepresented at or below the level of GS-12, and severely underrepresented above that level: at and above the level of GS-13, men outnumbered women more than two-to-one.

The underrepresentation of women was even more stark at the highest pay levels. At the highest General Schedule level, GS-15, women made up only 23% of the workforce in 1991. At even more senior pay grades, those senior executives compensated above the levels of the General Schedule, women held a mere 14 of 210 positions, only about 6.7% (USDC, 1991, p. 77).

Government Education Career Fields in 1999

Recall for a moment the “open atrium” example at the start of this article. All of the figures discussed above suggest that female educators within the federal government faced a strong glass ceiling effect in 1991. In a career field almost equally populated between men and women, salaries showed substantial inequity, and the highest-ranking levels of the field were very much a male preserve, with women filling less than 7% of those positions.

That same year, however, marked the passage of the Civil Rights Act and the establishment of the FGCC. Did the status of women educators improve in the years following 1991? Has pay equity been achieved, or at least improved? Are women better represented at the upper levels of the education field? For these answers, one can turn to the most recent federal statistics, covering the workforce at the start of the 2000 fiscal year.

Women in Federal Education Careers – 2000

If the above data shows an education career field with a strong glass ceiling at the start of the 1990s, how had the picture changed by the end of the decade?

To examine this, it is necessary to evaluate the most recent data, covering the federal workforce at the start of Fiscal Year 2000. The record demonstrates substantial improvement in the status of women educators over the years between 1991 and 2000.

Throughout the period, the size of the GS-and-related education workforce remained relatively stable, at about 19,000 employees. But the proportion of women in the field climbed dramatically, rising from 46.4% to 57% of the workforce in the year 2000: of the 19,016 people in the field, almost 11,000 were female (OPM, Occupations, 1999, p. 67).

The news on the compensation front, though, is not so positive. We saw that in 1991, female educators earned, in the aggregate, only about 78.4% of their male counterparts' salaries. This number barely changed over the decade of the 1990s, so that by the year 2000, women were earning only 79.8% of the men's pay (OPM, Occupations, 1999, p. 42). Of the dozens of career fields examined by this article's authors to date, no other field has seen such an insignificant improvement. For a more typical example, female federal auditors earned about 80% of the average male salary in 1991, and that climbed to 87% by 2000 (Baker & Lightle, 2001, p. 22).

The continuing salary disparity suggests a persistently strong glass ceiling, and

other data bear that out. Recall that in 1991 women made up 48.5% of the lower echelons of education at and below the rank of GS-12; by 2000, that number had climbed to 58.4% (OPM, Occupations, 1999, p. 67). So many women clustering at the lower levels of the career field has the effect of pulling down average female salaries, even if women make progress in moving into the upper ranks of the career field. ([see Figure 2](#)).

And such progress did occur in the 1990s. [Figure 2](#) shows that whereas women occupied only 28.7% of positions at and above GS-13 in 1991, by 2000 that percentage had risen to 45.6%.

At the highest General Schedule level, GS-15, the proportion of women nearly doubled from 1991 to 2000: In 1991, just 23% of GS-15s in education were female. By 2000, women educators made up more than 44% of all GS-15s. For the very highest pay grades, those senior pay plans above the General Schedule, the proportion of women increased there as well ([see Figure 3](#)), from 6.7% in 1991 to 9.3% in 2000 (OPM, Occupations, 1999, p. 67).

Analysis and Potential Causes

So the data makes clear that the picture for federally employed women in education improved considerably during the 1990s. Women grew from a minority of the federal education workforce to being a substantial majority by the year 2000. Although still lagging behind their male counterparts in representation at upper levels of management, the proportion of women at more senior levels did in fact increase markedly.

Less clear are the causes of this improvement. We have seen that the Civil Rights Act of 1991 and the establishment of the Federal Glass Ceiling Commission in that same year called for actions to improve the status of women in the workforce. But there were a variety of other socio-cultural influences at work in the 1990s that also likely had an effect.

The decade of the 1990s saw a host of changes in the cultural landscape of America, and those changes were reflected in the federal workforce. Some might find it ironic that President Clinton, so often publicly castigated for his behavior toward women, led an administration which provided unprecedented opportunities for women, especially at senior levels. Attorney General Janet Reno and Secretary of State Madeleine Albright became the first-ever female appointees to those positions, while other women served as heads of the Department of Health and Human Services, the Office of Management and Budget, and the Air Force. Women were so well represented in the Clinton Administration that one author noted that women comprised half the attendees at senior staff meetings in the White House (Kirschten, 2000).

Education is another likely cause of women's progress. Women outperform men in terms of grades and graduation rates at the baccalaureate level, and women are three times more likely to earn degrees in education than are men. Interestingly, perhaps due to family responsibilities, the superior performance of women at the

undergraduate level has not yet translated to proportionately higher graduate school attendance: Within four years of graduation, women and men enter graduate school at an identical rate of 30% (U.S. Department of Education, 2001, pp. i-vii, 1-2).

Another source of an opportunity for women in the federal education field is the extensive early retirement programs offered by the government in the 1990s. Given that men occupied a disproportionately high number of senior management positions, it would be expected that the impact of retirement programs would fall disproportionately on men. This trend is indeed felt in both the public and private sectors: the Hudson Institute estimates that men will make up nearly 60% of all departures from the workforce nationwide, through at least the year 2005 (Judy & D'Amico, 1998, p. 113).

Conclusions

This research describes the status and the progress of women in the federal government's education career fields. While it is clear that the 1990s brought significant advancement for women educators, further research is required to determine the reasons behind that progress. One optimistic view would suggest that this snapshot of the 1990s documents a stage in women's inexorable journey toward gender equity at work. But those with less rosy perspectives can find ample room for concern. Is it possible, for example, that the large influx of women into the career field, which took women from a 46% minority to a 57% majority in less than a decade, was merely a result of the strong 1990s economy drawing more men to the higher pay of the private sector? Is it also possible that federal education will be increasingly seen as "woman's work," subject to the social, economic, and cultural biases implicit in such a designation? Until more research is done in these areas, the causes of the 1990s progress will remain unclear.

Even so, for women aspiring to careers in federal education employment, the news is promising. It would be naïve to say that the glass ceiling has been shattered. Still, women have made substantial progress at moving into positions of upper management and senior leadership. From those positions, it is not unreasonable to expect that they can extend a helping hand to those women following behind them, and allow the entire workforce to move in the direction of gender equity.

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