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To benefit from new millennium opportunities, women should take advantage of the burgeoning information technology revolution and growth in other mathematics- and science-based occupations. Among occupations, professional jobs will increase the fastest and add the most employment. Among industries, the computer and data processing services industries lead in rate of employment growth. Immigration continues to play a major role in labor force growth, with the Hispanic labor force growing four times as fast as the rest of the labor force. Equal employment opportunity legislation in the 20th century has been particularly helpful to women. In the 20th century, women's labor force participation by age has changed from the "M" curve--with women entering the workforce, leaving to care for families, then returning to work--to the inverted "bowl" shape of men's participation by age. Although women's employment in high tech occupations has increased, there is still tremendous potential for women. One of the most significant changes that occurred between 1900-1999 is the rise of women managers. The gap between women's and men's earnings has been narrowing since 1973. Although their earnings increased sharply during the 1980s, during the 1990s the growth slowed and a gap persists. Women should be encouraged to press for fair or equal wages and workplaces that allow workers to meet work and family obligations. (YLB)
Women at the Millennium, Accomplishments and Challenges Ahead

Century of the Woman. Women made substantial progress during the 20th Century, closing the employment, occupational and earnings gaps significantly. It has been suggested that the 21st Century holds even more promise, leading some to refer to it as the "Century of the Woman."

What steps do women need to take to benefit from new millennium opportunities? Occupations which did not exist at the beginning of the 20th Century, computer scientists and analysts, for example, have become increasingly important in the information technology revolution. Yet, women's employment in this important field is actually falling behind, widening the occupational gap between women and men as shown in Figure 1. There is a similar problem in the field of engineering. Although the employment gap is widening between women and men engineers, there is still a stubbornly wide gap between their numbers, with women making up only 10.6 percent of all engineers in 1999. Engineering, like occupations in the physical sciences and mathematics, is slow to attract women -- and that is a national concern. It is in all of our best interests for women to take advantage of the burgeoning information technology revolution and growth in other
mathematics and science based occupations. Figure 2 shows engineering employment for women and men. More and more women are becoming aware that we are living in a new economy -- powered by technology, fueled by information, and driven by knowledge. And we are entering the new century with opportunity on our side. All workers must be prepared to acquire the necessary skills.

What can we project about the years ahead? The Bureau of Labor Statistics (BLS) projects that women will increase to 47.5 percent of the labor force by 2008.2

Among occupations, professional jobs will increase the fastest, and will add the most employment. Estimates indicate growth of about 5.3 million by 2008. Two-thirds of this job growth is expected among educators, specialists in computer technology, and health care. The number of computer engineers will more than double between 1998 and 2008, rising 108 percent in the 10-year period to 622,000; the number of computer support specialists will also double, rising 102 percent to 869,000 by 2008. Systems analysts will climb by 94 percent to 1.2 million in 2008. All other occupations are expected to make substantially smaller increases between 1998 and 2008.

Occupations requiring an associate's degree or higher degree or higher education, which accounts for 25 percent of all jobs in 1998, will account for 40 percent of job growth from 1998 to 2008. Computer engineers and systems analysts require bachelors' degrees, but the nearly one million workers who will fill computer support specialists positions will need only an associates' degree or technical skills training certification.

Among industries, the computer and data processing services industries lead all others in the rate of employment growth, and are expected to expand by nearly 2 million jobs between 1998 and 2008.

Immigration will continue to play a major role in the growth of the U.S. labor force, with the Hispanic labor force growing four times as fast as the rest of the labor force between 1998 and 2008. By 2008, the Hispanic labor force is expected to account for 12.7 percent of the labor force and blacks will account for 12.6 percent. Recent immigration to the U.S. has also significantly increased the Asian population.

How are women positioned to enter the 21st Century? Changes in the lives of women in the 20th Century laid the ground work for the prominence of women in the work force in the 21st Century. Some of these changes are political,
many are social, some are demographic, and others are economic.

**How did 20th Century laws benefit women?**

Although there has been legislation in the 20th century that has provided significant help to all workers, some legislation has been particularly helpful to women. The importance of the passage of the 19th amendment to the Constitution of the United States in 1920, granting women the right to vote, cannot be overemphasized. It provided the precedent for other legislation aimed at improving the conditions of women. The *Fair Labor Standards Act (FLSA)*, though not designed specifically for women, sets the minimum wage, overtime pay, record keeping and child labor standards affecting full-time and part-time workers in the private and public sectors.

Legislation in the early 1960's, which outlawed employment-based discrimination against women and minorities, began to open up job opportunities for them. *The Equal Pay Act of 1963* provided for equal pay for equal work without regard to sex. *Title VII of the Civil Rights Act of 1964*, as amended in 1991, is another law that protects workers from discrimination in employment. Discrimination based on race, color, religion, sex, and national origin is prohibited under this Act. The *Civil Rights Act of 1991* amended *Title VII* permitting individuals to recover punitive damages if they suffered discrimination. The U.S. Equal Employment Opportunity Commission (EEOC) is responsible for enforcing *Title VII*.

Aided by the passage of *Title IX of the Education Amendments of 1972*, which prohibits sex discrimination in public education, women also obtained greater opportunities to educate themselves for a wider array of occupational specialties, and employers began to hire them for these jobs. The 1993 *Family and Medical Leave Act (FMLA)* provides certain employees with up to 12 workweeks of unpaid, job-protected leave a year. The law also requires group health benefits to be maintained during the unpaid leave.

In addition to equal employment opportunity legislation, President Johnson prohibited discrimination based on race, color, creed or national origin by Federal contractors and subcontractors in 1965. Executive Order 11246 bans discrimination and requires affirmative action by Federal contractors and subcontractors; Executive Order 11375 extended these protections to women in 1967.

**How did international organizations foster women’s progress?** Four United Nations World Conferences on Women have taken place in the last quarter of the 20th Century, culminating in the Platform For Action at the 1995 Beijing Conference. This conference established steps to be taken by governments, organizations, and individuals to further women's full and equal participation in economic, social, and political life in the 21st Century. In 1995, President Clinton announced the formation of an Interagency Women's Council which is charged with coordinating the implementation of the Platform for Action in the U.S.

**What were the defining changes in the labor market for women in the 20th Century?** When we look at women’s experience in the labor force during the 20th Century, we see the steady increase of the number of women in the labor force. **Figure 3** shows that from World War II onward,
the labor force gap between women and men narrows, with steepest increases in numbers of women in the labor force from 1960 through the 1990's.

**Figure 4** presents data on the proportion of women in the labor force from 1900 through 1999. The proportion of women in the labor force climbed significantly between 1900 and 1990, but seems to have leveled off between 1990 and 1999, with women making up nearly half of the labor force.

**How did women's labor force participation change in the 20th Century?** Men's labor force participation by age appears as an inverted "bowl", as men's participation rises until prime working years of 25-44 are reached. Subsequently, men's participation slowly declines. Men's participation rates are higher than women's labor force participation rates at all ages as shown in **Figure 5**. **Figure 6** shows the "M" curve in women's labor force participation by age. Women, historically, would enter the labor force, then leave to care for their families, and would return to work later in life. However, by the early 1980's, the "M" shape for women's labor force participation disappeared; and, like men's labor force participation by age, also resembled an inverted "bowl."

**How did demographic changes mark the 20th Century?** The "Baby Boom", the large number of babies born between 1946 and 1964, as well as the lengthening of the life span for both women and men have combined to produce a very large group of aging workers as we enter the 21st Century.

Family make-up has changed significantly over the century. Many more women do not have children. Census data indicates that 17.5 percent of women 40-44 years of age in 1995 had not had a child, compared to 10.2 percent in 1976. Smaller proportions of married couple families, and larger numbers of single parents were also characteristic of family structure toward the end of the 20th Century.

**How did technological advances, and the impact of the global market affect women?** A significant part of the growth in technology during the latter part of this century has been the exponential growth of information technology. The Internet explosion, including *e-commerce*, is one of the most important recent advances in the information technology revolution. Women's employment in high tech occupations has increased. However, there is tremendous
potential for women in the high-tech industries.

How did occupational profiles of women change during the 20th Century? Decennial Census data indicates that in 1900, almost one in five women were white collar workers, and one in five were farm workers. The other three out of five were manual, or service workers. At the same time about one in five men were white collar workers, while two in five were farm workers. Another two in five men were manual or service workers.

It is difficult to make detailed occupational comparisons over the whole century because the occupational classification system, as well as jobs themselves, have changed through the years. Prior to 1999, the last occupational classification system change occurred in 1983. Occupational data before 1983 are not directly comparable with current data.

However, there were occupational groups which approximate those in the current classification system. These similar occupational groups can be used to trace women’s occupational paths over the century. While at the turn of the century, working men outnumbered working women by a substantial margin—nearly 35 percent of all professionals were women. Almost all of the women professionals were elementary and secondary public school teachers and nurses. By 1999, 53.5 percent of all professionals were women. There were 20.9 million professionals in the United States, of whom 11.2 million were women. The largest occupational group of women professionals remained the 4.4 million teachers who made up 39.0 percent of all women professionals.

We also know that one of the most significant changes that has taken place between 1900 and 1999 is the rise of women managers. In 1900, only 4.4 percent of managers were women. By 1999, 45.1 percent of all managers were women, a ten-fold increase. In 1999, 8.8 million of the 19.6 million managers in the Nation were women. As is the case with women professionals, women managers tend to cluster in certain specialties. These include medicine and health care, human resources, education, and management-related occupations, such as underwriters and accountants. In 1999, women managers and professionals made up 32.3...
Stubborn Pay Gap Persists for Almost 50 Years

Constant Dollars in Thousands

|       | 51 | 53 | 55 | 57 | 59 | 61 | 63 | 65 | 67 | 69 | 71 | 73 | 75 | 77 | 79 | 81 | 83 | 85 | 87 | 89 | 91 | 93 | 95 | 97 |
|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| MEN   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| WOMEN |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |


Figure 7

percent of all employed women compared to 28.6 percent of all men.

How did women's compensation change during the 20th Century? Research by Smith and Ward suggested that the wages of working women did not increase relative to those of working men between 1920 and 1980 because the skills of working women did not increase relative to men over much of this period. Men's earnings reached a peak in real dollars in 1973. At the same time, women, even mothers of young children, started to enter the labor force in large numbers. The earnings of women have climbed steadily in real dollars, except for temporary dips during recessions, since the early 1950's, when data on earnings by gender were first collected. Men's earnings never regained 1973 levels in real dollars. Figure 7 outlines the changes in the real annual median earnings of year-round, full-time women and men workers from 1951 to 1998. The gap between women's and men's earnings has been narrowing since 1973.

Women's earnings, increased sharply during the 1980's. After the recession in the early 1990's, Census data on women's earnings compared to men's earnings failed to show the steep gains exhibited during the 1980's. Between 1980 and 1990, the ratio of women's annual earnings to men's earnings for full-time, year-round workers climbed from 60.2 percent to 71.6 percent. Between 1990 and 1998, the ratio climbed from 71.6 percent to 73.2 percent. Similarly, between 1980 and 1990, BLS data on the weekly earnings ratio of full-time women workers to full-time men climbed from 64.4 percent to 71.9 percent, while between 1990 and 1999, the ratio climbed from 71.9 percent to 76.5 percent. Between 1980 and 1990, the ratio of women's to men's hourly earnings climbed from 64.8 percent to 77.9 percent. Between 1990 and 1999, the ratio climbed from 77.9 percent to 83.8 percent.

What can women do to take advantage of opportunities in the new millennium? There are still challenges to be met by women, particularly in becoming full partners in the information technology revolution. Women and girls should be encouraged to explore careers in information technology, engineering, math, and science for rewarding work and compensation in the coming millennium. Women and men should negotiate and press for fair or equal wages and salaries and work places that will allow workers to meet work and family obligations. It is important to emphasize to employers that women are nearly half of the work force. Employers must adjust to meet women's needs, as well as men's, to ensure the success of their business ventures. It is in their own best interests to be fair to all workers.
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