

The Gender Gap in Education and Employment

In 2011, the US Census Bureau announced that in 2010, among working Americans aged twenty-five and older, more women had bachelor's degrees than men (37 versus 35 percent)—reflecting a history since the 1990s of American women enrolling in college at a greater rate than men. As of 2013, the World Economic Forum reported that the United States ranked first (tied with twenty-four other countries) out of a sample of 136 nations in terms of gender equality in education, and yet the same report indicates that the United States ranks twenty-third in overall gender equality, just behind the African nation of Burundi.

While women have made significant gains, they continue to lag behind men in professional achievement and are underrepresented in key occupations, including the STEM fields (science, technology, engineering, and mathematics). The gap between education and professional achievement is one of the current frontiers in the ongoing struggle to achieve gender equality. To investigate this complex issue, researchers are taking an in-depth look at each stage of education and reevaluating seminal issues—including the benefits and detriments of coeducation and the formation of gender stereotypes—to discover the best way to address educational disparities in the present and future.

Shifting Balance in Education

America's first public school was established in 1635 near Boston, Massachusetts, but women were not permitted to attend public schools for more than a century. Boston public primary schools began admitting women in 1789 and, in the 1820s, opened public secondary schools to female students. In 1789, the literacy rate for American women was only half that of men. After women were admitted to the public school system, literacy rates quickly grew, and by the 1870s, women students surpassed their male counterparts in literacy and academic achievement at the primary and secondary levels.

Efforts to promote educational equality commingled with the women's suffrage movement and the struggle to achieve employment equality. Landmark legal victories, such as ratification of the Nineteenth Amendment in 1920, passage of the Civil Rights Act of 1964, and the Title IX amendment of 1972, which officially prohibits gender bias in higher education, have helped to level the playing field in terms of educational opportunity. By 1980, women outpaced men in undergraduate enrollment, though they still lagged behind in degree completion.

In 2011, the Census Bureau reported that 36 percent of women aged twenty-five to twenty-nine obtained bachelor's degrees or higher, compared to 28 percent of men.

In the wake of these developments, researchers are attempting to determine how the changing demographics of education will affect the future of American society. In addition, educators are still attempting to address continuing gender gaps in education and the disparity between female educational achievement and later career success.

Gender and Learning

In the twenty-first century, there has been a growing effort to discover why men are falling behind in education. Some theorists argue that the education system has become increasingly “feminized” through the adoption of teaching methods that favor women over men. Increasingly, theoretical gender-based differences in learning have been used as an argument to promote same-gender schooling or specific single-gender programs within public schools.

Recent MRI studies have shown that male and female brains develop differently, and that these differences may affect cognitive learning. Gender differences in neurology have become a primary argument for gender-specific education. However, neurologists argue that the complexity of brain development makes it difficult to differentiate between the effects of biology and environmental influence. For instance, a 2008 study published in *Scientific American* found that neuronal structures used in social cognition appear to correlate with a child’s biological sex but also with the development of “feminine” personality characteristics that appear in both male and female children.

Dr. Leonard Sax, director of the National Association for Single Sex Education, has been one of the most outspoken supporters of creating single-sex options in public education. Sax believes that single-sex institutions and programs can address innate and learned behavioral characteristics that differ according to gender and argues that the current model, with a focus on homework and independent study, is not the best way to educate male students. Supporters also argue that single-sex education frees both sexes from engaging in gender roles aimed at the opposite sex and therefore allows students to concentrate on their education.

However, in a 2011 study published in *Science*, researchers presented evidence that single-sex education may contribute to the development of institutional sexism and argued that current research does not validate the claim that single-sex education is more effective for learning. While limited studies indicate improved academic performance in single-sex schools, critics argue that these same pilot programs also feature innovations such as smaller class size and modern teaching methods that might be responsible for improved student performance. A 2010 study in *Child Development* suggests that children as young as three display an increased tendency to accept gender stereotypes when separated into single-sex classrooms.

In a 2006 report for the think tank Education Sector, analyst Sarah Mead questions the need to better address the educational needs of male students, and cites statistics indicating that both male and female academic performance has improved, though female students are improving at a faster rate. Some critics of single-sex education believe that research is needed to determine the psychological mechanisms