



THE RISE OF WOMEN: The Growing Gender Gap in Education and What It Means for American Schools

A Briefing Paper Prepared for the
Council on Contemporary Families

Thomas A. DiPrete
Professor of Sociology
Columbia University

Claudia Buchmann
Professor of Sociology
The Ohio State University

March 13, 2013



Executive Summary

According to the current brief report, “the most important predictor of boys’ achievement is the extent to which the school culture expects, values, and rewards academic effort.” Sociologists Claudia Buchmann (Ohio State) and Thomas DiPrete (Columbia University) present their in-depth findings on the much-debated reasons why women outstrip men in education—also the subject of their new book—in [“The Rise of Women: The Growing Gender Gap in Education and What it Means for American Schools.”](#)

When did the gender gap begin? According to this CCF briefing report, some of the gender gap in schooling is new and some is not. For about 100 years, the authors explain, girls have been making better grades than boys. But only since the 1970s have women been catching up to—and surpassing—men in terms of graduation rates from college and graduate school. The authors report, “Back in 1960, more than twice as many men as women between the ages of 26-28 were college graduates. Between 1970 and 2010, men’s rate of B.A. completion grew by just 7 percent, rising from 20 to 27 percent in those 40 years. In contrast, women’s rates almost tripled, rising from 14 percent to 36 percent.”

Is the gender gap translating into wages? “The rise of women in the educational realm has not wiped out the gender wage gap -- women with a college degree continue to earn less on average than men with a college degree.” But because more women are getting college degrees, growing numbers of women are earning more than their less-educated men age-mates, and the gender wage gap has narrowed considerably.” But, report the authors, if men were keeping up with women in terms of education, men would on average be earning four percent more than they do now, and their unemployment rate would be one-half percentage point lower.

What should schools do? The authors debunk the notion that boys’ underperformance in school is caused by a “feminized” learning environment that needs to be made more boy-friendly. Making curriculum, teachers, or classroom more “masculine” is not the answer, they show. In fact, boys do better in school in classrooms that have more girls and that emphasize extracurricular activities such as music and art as well as holding both girls and boys to high academic standards. But boys do need to learn how much today’s economy rewards academic achievement rather than traditionally masculine blue-collar work.

Stephanie Coontz
Co-Chair and Director of Research and Public Education
Council on Contemporary Families

The Rise of Women: The Growing Gender Gap in Education and What It Means for American Schools

Thomas A. DiPrete & Claudia Buchmann
Professor of Sociology
Columbia University

The way education used to be

Back in 1960, more than twice as many men as women between the ages of 26-28 were college graduates. As late as 1970, only 14 percent of young women between the ages of 26 and 28 had finished college, compared to 20 percent of men. But then a dramatic change occurred. While men's college completion rates slowed, women's skyrocketed.

Between 1970 and 2010, men's rate of B.A. completion grew by just 7 percent, rising from 20 to 27 percent in those 40 years. In contrast, women's rates almost tripled, rising from 14 percent to 36 percent. Today women also earn 60 percent of all master's degrees and more than half of all doctoral and professional degrees. The only significant area of education in which women still lag behind men is in their representation in science and engineering programs. But even in some science fields they have made progress; only 25 percent of advanced engineering degrees go to women, but they earn 52 percent of master's and doctoral degrees in the life sciences.

The rise of women in the educational realm has not wiped out the gender wage gap -- even women with a college degree [continue to earn less on average](#) than men with a college degree. But the rapid rise of women with college degrees has certainly narrowed the gender wage gap. In 1978 full-time working women earned 62 cents for every dollar their male counterparts earned. By 2011 this had increased to 82 cents. And unlike the past, when less-educated men typically out-earned more educated women, the fact that more women are now earning B.A.s means that growing numbers of women do out-earn men in the same age group. If men had as much education as today's women do, their personal income would be nearly 4 percent higher and their unemployment rate a half percentage point lower than it is today.

Girls have outperformed boys in school grades for more than 100 years. But a century ago, women commonly had to choose between getting an education and having a family. According to economist Claudia Goldin, women who graduated from college in the first two decades of the 20th century were four times less likely to have married by age 50 than their counterparts who did not attend college. And among the college-educated women who married, about 30 percent never had children.

Even when education became more compatible with family life in the 1950s, most Americans believed that the point of an education was simply to make women better wives and mothers, and that a woman's place was in the home. As a result, even though more

women entered college in that era, their drop-out rates were much higher, with many quitting college as soon as they got engaged or married.

How education changed

These norms began to erode in the 1960s and 70s, as the civil rights and women's movements promoted equal opportunity in education and employment for women and minorities. These changes, along with advances in contraception, created an environment that was more supportive of women getting more education and using their degrees to find work outside the home. And the [increasing wage advantage of college-educated workers](#) has given them a powerful incentive to do so. Three decades ago full-time workers with a bachelor's degree earned 40 percent more than those with only a high school diploma; today, they earn about 80 percent more.

In the 1970s, boys led girls in their college preparatory coursework, but today more girls than boys take these advanced classes. For example, 43 percent of girls complete both Algebra 2 and Chemistry in high school; only 38 percent of boys do. Moreover, among students taking these advanced courses, girls earn grades that are on average .20 GPA points higher than boys.

The puzzling gender achievement gap and what "they" say

But why do boys get lower grades than girls, and why have they responded so much more slowly and partially to changes in the job market that have increased the rewards for academic achievement? Researchers agree that it is not because girls are smarter. In fact, while boys score slightly higher in math tests and girls score slightly higher in reading tests, overall the cognitive abilities of boys and girls are very similar. The difference in grades lies in effort and engagement. On average, girls are more likely than boys to report that they like school and that good grades are very important to them. Girls also spend more time studying than boys.

Many observers believe that boys' lower engagement with school is a result of biological differences between males and females. They say that boys need to engage in rough and tumble play, get their hands dirty, build things, and read books about war, espionage and sports if they are supposed to learn. Boys fail, [they claim](#), because schools do not give boys enough opportunities to do "boy" stuff.

What we say

We do not agree. Our research shows that boys' underperformance in school has more to do with society's norms about masculinity than with anatomy, hormones or brain structure. In fact, boys involved in extracurricular cultural activities such as music, art, drama, and foreign languages report higher levels of school engagement and get better grades than other boys. But these cultural activities are often denigrated as un-masculine by pre-adolescent and adolescent boys -- especially those from working- or lower-class backgrounds. Sociologists [C.J. Pascoe](#) and [Edward Morris](#) relate numerous examples of

boys who strive for good grades as being labeled “pussies” or “fags” by their peers.

Commentators who emphasize boys’ special needs usually propose that we make schools more “boy-friendly” by offering single-sex classrooms where “boys can be boys,” by recruiting more male teachers, and by providing more rough and tumble activities. Our research shows that, contrary to what is rapidly becoming “conventional wisdom,” this is precisely the wrong strategy. Most boys and girls learn more in classrooms where girls are present. In classrooms with more girls, both boys and girls score [higher on math and reading tests](#). And several [recent studies](#) refute [the claim that teacher gender matters](#) for boys’ or girls’ achievement.

Two key findings for the way forward

Our research yields two important findings. First, boys have less understanding than girls about how their future success in college and work is directly linked to their academic effort in middle and high school. In part, this may be due to many Americans still hearkening back to a time when job success for many men was linked more to physical strength and hard manual labor than to getting good grades in school. Young men as well as women will be further motivated to do well in school when our education system provides a clearer link between educational programs and workplace opportunities in our changing labor market.

Second, the most important predictor of boys’ achievement is the extent to which the school culture expects, values, and rewards academic effort. We need schools that set high expectations, treat each student as an individual (as opposed to a gender stereotype), and motivate all students to invest in their education so they can reap the big returns to a college degree that exist in today’s labor market.

The win-win news is that the same reforms that help more boys achieve college success help girls as well. For example, schools with strong science curricula not only promote male achievement but increase girls’ plans to major in science and engineering. Schools that promote strong academic climates reduce gender gaps in grades and promote healthy, multi-faceted gender identities for both boys and girls. In education, as in the rest of society, it’s time to discard the zero-sum game of the “gender wars” mentality and start helping males and females to work together for success.

Sources on Related Topics

For perspectives and research on boys and bullying contact CJ Pascoe, Assistant Professor of Sociology, Colorado College, at c.j.pascoe@coloradocollege.edu.

For research on economic influences over college completion, contact Rachel Dwyer, Associate Professor of Sociology, Ohio State University, at dwyer.46@osu.edu.

About the Authors

Thomas A. DiPrete
Giddings Professor of Sociology
Columbia University
New York, NY
Email:
Phone 212-851-9281

Claudia Buchmann
Professor of Sociology
The Ohio State University
Columbus, OH
Email:
Phone: 614-247-8363

DiPrete and Buchmann are authors of *The Rise of Women: The Growing Gender Gap in Education and What it Means for American Schools*, out this month from the Russell-Sage Foundation.

Media Contact

Stephanie Coontz
Professor of History and Family Studies
The Evergreen State College
Co-Chair and Director of Research and Public Education
Council on Contemporary Families
Email: coontzs@msn.com
Phone: 360-352-8117

About CCF

The Council on Contemporary Families is a non-profit, non-partisan organization dedicated to providing the press and public with the latest research and best-practice findings about American families. Our members include demographers, economists, family therapists, historians, political scientists, psychologists, social workers, sociologists, as well as other family social scientists and practitioners.

Founded in 1996 and now based in the School of Education and Human Development at the University of Miami, the Council's mission is to enhance the national understanding of how and why contemporary families are changing, what needs and challenges they face, and how these needs can best be met. To fulfill that mission, the Council holds annual conferences, open to the public, and issues periodic briefing papers and fact sheets.

Access our publications and learn more about CCF membership at www.contemporaryfamilies.org