


Gender Gaps

The Gaps in
College Degree Attainment
Between New England
Men and Women Are Rising

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Boys have been falling behind girls in school on a wide array of performance indicators. The data show weaker reading and writing skills, more frequent assignment to remedial classes, higher dropout rates, and lower college attendance among men.¹ Over the past three decades, women first gained on men and then surpassed them in college degree attainment.² For example, in 1980, 23 percent of 22- to 34-year-old males in the United States had earned a bachelor's or higher degree versus only 19 percent of women. **By 2005, 30 percent of the nation's women in this age group held a bachelor's versus only 24 percent of men.** The gaps have been widening over time and have broad implications for policymakers and society at large.

Table 1

Degrees awarded to men per 100 women's degrees, United States trends

School Year	Associate's	Bachelor's	Master's	Ph.D.
1976-1977	108	116	112	312
1984-1985	81	96	99	192
1989-1990	72	87	90	175
1999-2000	66	75	72	127
2002-2003	67	74	70	112

Source: U.S. Department of Education, National Center for Education Statistics, "Earned Degrees Conferred."

Table 3

Degrees awarded to men per 100 women's degrees, 2003-2004, New England trends

	Associate's	Bachelor's	Master's	Ph.D.
Connecticut	50	78	71	114
Maine	59	66	43	154
Massachusetts	58	75	66	114
New Hampshire	64	72	79	147
Rhode Island	92	76	72	102
Vermont	76	79	56	83

College Degree Attainment

In the late 1960s, U.S. women were obtaining two-year and four-year college degrees at 75 percent the rate of men but were gaining. By the mid-1980s, men were behind in associate's, bachelor's, and master's degrees, and they have continued to lose ground. Only for Ph.D. degrees do men keep outperforming women, but the gender gap in this area narrowed considerably by 2004. (See Table 1.) New England trends have been similar. (See Table 2.)

In 2003-2004, men in every New England state obtained fewer associate's, bachelor's, and master's degrees than women, although the size of the gaps varied across states. (See Table 3.) For example, the gap for Rhode Island associate's degree recipients was 92 men per 100 women, but the gap was much larger—only 50 per 100—in Connecticut. Vermont men obtained 79 bachelor's degrees per 100 for women. In Maine, the gap was 66 degrees for men per 100 women's degrees.

Although the gender gaps in degree attainment exist in each major race-ethnic group, they vary across these groups. Given the larger pool of minority college graduates in Connecticut and Massachusetts, we

Table 2

Degrees awarded to men per 100 women's degrees, New England trends

School Year	Associate's	Bachelor's	Master's	Ph.D.
1984-1985	66*	87	105	192
1989-1990	60	82	84	161
1994-1995	57	86	75	149
1999-2000	64	76	68	127
2002-2003	61	74	67	114

* Data for associate's degrees are for the 1980-1981 school year.

Table 4

Degrees awarded to men per 100 women's degrees by race/ethnicity, 2003-2004

	Associate's	Bachelor's	Master's	Ph.D.
Connecticut				
- Asian	57	83	83	73
- Black	34	55	55	67
- Hispanic	47	65	88	67
- White	53	72	59	91
Massachusetts				
- Asian	88	67	79	133
- Black	51	63	45	62
- Hispanic	41	65	62	111
- White	57	75	58	84

analyzed the data for race and ethnicity separately. In each one, the gap in associate's and bachelor's degrees was highest among Blacks and Hispanics and typically lowest among Asians.³ (See Table 4.)

Among bachelor's recipients in Connecticut, the gaps ranged from 83 degrees for men per 100 women among Asians to a low of 55 among blacks. In Massachusetts, the associate's degree gender gap was 88 men to 100 women for Asians, 51 to 100 for blacks, and 41 to 100 for Hispanics. The low rates of degree attainment for New England black and Hispanic males should be a major concern to policymakers.

All signs point to the gaps widening in the near future. Nationally, the number of male first-time freshmen per 100 females declined steadily from fall 1999 through 2003. In New England, the gap is modestly larger but increased more gradually. (See Table 5.) In every New England state, fewer men than women enrolled as first-year students in 2003, with the smallest gap in Vermont and the largest in Connecticut.

These gender gaps in initial college attendance are exacerbated by higher rates of college persistence and degree attainment among women.⁴ National projections of college degree attainment by men and women over the remainder of the decade indicate that gender gaps will widen.⁵

Labor Market Consequences of Degree Attainment

The economic value of college degrees keeps growing.⁶ College-educated men and women have more hours of employment over their lifetimes and higher earnings than the less educated.⁷ They are more likely to receive key employee benefits and at higher levels.

To focus on Massachusetts, we analyzed the findings of the 2005 American Community Survey (ACS).⁸ We estimated the mean annual earnings of workers who had differing educational attainment and were employed year-round and full-time in 2004 to 2005. (See Table 6.)

Workers with postsecondary degrees enjoyed substantial earnings advantages over peers who had only a high school diploma. The mean annual earnings of associate's

Table 5
Numbers of men per 100 women among first-time freshmen, 1999 to 2003

	1999	2000	2001	2002	2003
United States	87	86	85	84	83
New England	83	82	83	82	81

degree holders were approximately 19 percent above those of high school graduates; whereas bachelor's degree holders' earnings were 76 percent higher.

Women with an associate's degree had slightly higher absolute dollar and percentage earnings advantages than men over their respective peers who had only a high school diploma; for higher degrees, the advantage shifts to men. Among bachelor's degree recipients, the mean annual earnings of employed Massachusetts males with a bachelor's degree were 84 percent above those of peers who had only high school; for women the difference was 72 percent.⁹

Given the large annual and lifetime earnings advantages for males with a bachelor's degree, men are not avoiding college because they think it won't benefit them. Some powerful noneconomic forces must be at work.

The Fiscal Consequences of Degree Attainment

The benefits of higher education do not accrue only to the individual degree recipient.¹⁰ The rest of society also receives important fiscal benefits from better-educated workers. As a result of their higher earnings, college educated workers will pay considerably more in taxes. Better educated adults under the age of 65 also are less likely to receive cash income transfers and in-kind assistance from federal, state, and local governments.

We estimated the size of the fiscal benefits associated with better-educated adults by analyzing the findings of special tabulations from the March 2005 Current Population Surveys in New England, in which the U.S. Census Bureau imputed estimates of the likely amount of taxes paid by individuals based on their incomes, marital status, and family living arrangements. We also included cash transfer incomes and in-kind benefits for each adult aged 18 to 64 in New England during 2004 by educational attainment. The net fiscal benefits to the federal and state government are equal to the difference between the annual taxes paid by an individual and the value of the cash and in-kind transfers that he or she received. (See Table 7.)

Overall, the mean net fiscal benefits (total taxes/total transfers) to the government ranged from a low of -\$4,618 for persons without a high school diploma to +\$1,872 for high school graduates, and to highs of nearly +\$12,000 for bachelor's holders and +\$19,355 for those with a master's or higher. The values of these mean net fiscal benefits for men in each educational category were higher than those of their female counterparts because of their higher mean annual earnings.

Table 6
Mean annual earnings of Massachusetts residents aged 20 to 64 employed full-time 40 or more weeks, 2004-2005

Educational Level	All	Men	Women
High school diploma/GED	\$40,374	\$45,153	\$31,834
Associate's degree	\$48,113	\$54,095	\$41,324
Bachelor's degree	\$70,878	\$83,174	\$54,844
Master's or higher degree	\$95,687	\$113,293	\$73,809
Bachelor's advantage over high school diploma	1.76	1.84	1.72

Source: 2005 American Community Survey, public use files, tabulations by authors.

Table 7
Estimate of annual average tax payments, cash transfers, and noncash transfers of 16-to-64-year-old men and women in New England, by educational attainment, 2004

	All	Men	Women
Mean tax payments (A)			
<12 or 12, no HS diploma	\$1,560	\$2,072	\$970
HS graduate/GED	\$5,039	\$6,022	\$3,920
1-3 years of college	\$6,872	\$8,468	\$5,586
Bachelor's degree	\$13,460	\$15,406	\$11,724
Master's or higher	\$20,101	\$24,358	\$15,936
Total	\$8,497	\$9,963	\$7,064
Mean cash and in-kind transfers (B)			
<12 or 12, no HS diploma	\$6,178	\$5,555	\$6,894
HS graduate/GED	\$3,167	\$3,145	\$3,192
1-3 years of college	\$2,107	\$2,219	\$2,017
Bachelor's degree	\$1,566	\$1,154	\$1,934
Master's or higher	\$746	\$785	\$708
Total	\$2,715	\$2,641	\$2,787
Taxes - Transfers (C)			
<12 or 12, no HS diploma	-\$4,618	-\$3,484	-\$5,924
HS graduate/GED	\$1,872	\$2,877	\$728
1-3 years of college			
Bachelor's degree	\$11,894	\$14,252	\$9,790
Master's or higher	\$19,355	\$23,573	\$15,227
Total	\$5,782	\$7,321	\$4,277

Source: March 2005 CPS Work Experience and Income Supplements, U.S. Census Bureau, tabulations by Center for Labor Market Studies.

Notes: Taxes include federal and state income tax liabilities, federal and Social Security retirement payroll deductions. Cash transfers include unemployment benefits, workers' compensation, Social Security retirement, Supplemental Security Income, veterans' payments, survivors' income, and Social Security disability income. In-kind transfers include earned income tax credits, the market values of food stamps, Medicare, and Medicaid, market values of housing and school lunch subsidies, and energy assistance.

In the Public Interest

A better educated population will improve the size, quality, and productivity of the future New England labor force. It also will use fewer government transfers and will provide increased government revenue. But in addition to those reasons, it behooves policymakers to be concerned and to investigate the impact of the continuing trend on quality-of-life issues and family formation.

There is much to learn. Why are the educational disparities for black and Hispanic men so stark? Are educated women going

to be the main breadwinners in families? Should government do something? If so, what?

With the trend now well into a third decade, it seems unlikely that it will reverse itself without new public policy actions. Recognizing the problem is the first step to encouraging parents, schools, communities, and state educational policymakers to take action.

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Endnotes

¹ See Amy Benfer, "Lost Boys," *www.salon.com*, February 5, 2003; Chris Magnusson, "Boys and Schooling: A Gender-Based Achievement Gap," Harvard Divinity School, Cambridge, 2005; Christina Hoff Sommers, *The War Against Boys* (New York: Simon and Schuster, 2000); Andrew Sum, Neil Sullivan, et. al, *Gender Gaps in High School Dropout Rates and College Attendance Rates in Massachusetts and Its Large Cities*, Center for Labor Market Studies and Boston Private Industry Council, Boston, 2002; Alan Zarembo, "Death of the Male," *Newsweek International*, September 16, 2002; Ron Suskind, *A Hope in the Unseen* (New York: Broadway Books, 1998).

² See Jamilah Evelyn, "Community Colleges Start to Ask, Where Are the Men?" *The Chronicle of Higher Education*, June 28, 2002; Thomas Mortenson, "The Changing Gender Balance: An Overview," paper prepared for Fewer Men in Campus: A Puzzle for Liberal Arts Colleges and Universities, November 15-16, 1999; Andrew Sum, Neeta Fogg, Paul Harrington, et. al, *The Growing Gender Gaps in College Enrollment and Degree Attainment in the U.S. and Their Potential Economic and Social Consequences*, report prepared for the Business Roundtable, Washington, D.C., January 2002. In the United Kingdom, too, women are enrolling in college at rates well above those of men. See Richard Morrison, "Who'd Be a Boy?" *The Times*, August 15, 2001.

³ One exception: in Massachusetts, the bachelor's degree gender gap for Asians was greater than for whites.

⁴ See Christina Chang Wei, Laura Horn, and C. Dennis Carroll, *Persistence and Attainment of Beginning Students with Pell Grants*, U.S. Department of Education, National Center for Education Statistics, May 2002; Laura Horn and Rachel Berger, *College Persistence on the Rise? Changes in Five-year Degree Completion and Post-secondary Persistence Rates Between 1994 and 2000*, U.S. Department of Education, National Center for Education Statistics, November 2004.

⁵ See U.S. Department of Education, National Center for Education Statistics, *The Condition of Education, 2002*, U.S. Government Printing Office, Washington, D.C., 2002.

⁶ See Andrew Sum, Ishwar Khatiwada, and Joseph McLaughlin, *The Labor Market Experiences of the Nation's Young Adults Since the Publication of America's Choice*, prepared for the National Center on Education and the Economy, Washington, D.C., August 2005.

⁷ Andrew Sum, et al., *Gender Gaps in College Attendance Rates in Massachusetts*.

⁸ The ACS surveys were conducted by the U.S. Census Bureau using a questionnaire similar to the long-form questionnaire used for the 2000 Census. ACS surveys were completed by nearly 35,000 households across the state.

⁹ The opportunity costs of attending college have declined considerably for men; they are not much higher than for women. Weekly-wage differences between young male and female high school graduates have narrowed over the past few decades.

¹⁰ The estimated gross differences in earnings do not reflect the net impact of completing college since college students have traits, including higher academic achievement, that would be associated with higher earnings regardless of schooling. Even after controlling for these differences, 75 percent to 80 percent of the annual earnings differences remain.

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