



Mark J. Perry

@Mark_J_Perry

September 30, 2013 6:14 pm | *AEIdeas*

Women earned majority of doctoral degrees in 2012 for 4th straight year, and outnumber men in grad school 141 to 100

Carpe Diem



Doctoral Degrees, By Field and Gender, 2012

Field	Male	Female	Females per 100 Males
Arts and Humanities	46.4%	53.6%	115.5
Biological, Agricultural Sciences	47.6%	52.4%	110.1
Business	56.8%	43.2%	76.1
Education	32.4%	67.6%	208.6
Engineering	77.8%	22.2%	28.5
Health Sciences	29.2%	70.8%	242.5
Mathematics and Computer Sciences	74.8%	25.2%	33.7
Physical Sciences	66.6%	33.4%	50.2
Public Administration	43.6%	56.4%	129.4
Social, Behavioral Sciences	38.9%	61.1%	157.1
Other Fields	46.4%	53.6%	115.5
Total	47.8%	52.2%	109.2

Source: Council of Graduate Schools

Master's Degrees, By Field and Gender, 2012

	Male	Female	Females per 100 Males
Arts and Humanities	41.2%	58.8%	142.7
Biological, Agricultural Sciences	44.5%	55.5%	124.7
Business	57.3%	42.7%	74.5
Education	23.8%	76.2%	320.2
Engineering	76.9%	23.1%	30.0
Health Sciences	19.3%	80.7%	418.1
Mathematics and Computer Sciences	69.1%	30.9%	44.7
Physical Sciences	58.5%	41.5%	70.9
Public Administration	23.2%	76.8%	331.0
Social, Behavioral Sciences	37.9%	62.1%	163.9
Other Fields	37.4%	62.6%	167.4
Total	40.5%	59.5%	146.9

Source: Council of Graduate Schools

Total Graduate School Enrollment, By Field and Gender, 2012

Field	Male	Female	Females per 100 Males
Arts and Humanities	43.5%	56.5%	129.9
Biological, Agricultural Sciences	46.5%	53.5%	115.1
Business	55.2%	44.8%	81.2
Education	25.5%	74.5%	292.2
Engineering	76.7%	23.3%	30.4
Health Sciences	22.1%	77.9%	352.5
Mathematics and Computer Sciences	70.9%	29.1%	41.0
Physical Sciences	62.8%	37.2%	59.2
Public Administration	24.5%	75.5%	308.2
Social, Behavioral Sciences	37.7%	62.3%	165.3
Other Fields	39.7%	60.3%	151.9
Total	41.5%	58.5%	141.0

Source: Council of Graduate Schools

The Council of Graduate Schools (CGS) released its [annual report recently on US graduate school enrollment and degrees for 2012](#), and here are some of the more interesting findings in this year's report:

1. **For the fourth year in a row, women in 2012 earned a majority of doctoral degrees.** Of the 67,220 doctoral degrees awarded in 2012 at US universities, women earned 34,761 of those degrees and 52.2% of the total, compared to 31,830 degrees awarded to men who earned 47.8% of the total (see top chart above). The 52.2% female share of doctoral degrees in 2012 decreased slightly from the 52.5% share in 2011, but was higher than the 51.9% female share in 2010 and the 50.4% female share in 2009, which was the first year ever that women outnumbered men earning doctoral degrees. Previously, women started earning a majority of associate's degrees in 1978, master's degrees in 1981, and bachelor's degrees in 1982 according to the Department of Education. Therefore 2009 marked the year when men officially became the "second sex" in higher education by earning a minority of college degrees at all levels from associate's degrees up to doctoral degrees.

2. **By field of study, women earning doctoral degrees in 2012 outnumbered men in 7 of the 11 graduate fields** tracked by the CGS (see top chart above): Arts and Humanities (53.6% female), Biology (52.4%, that is a STEM field), Education (67.6%), Health Sciences (70.8%), Public Administration (56.4%), Social/Behavioral Studies (61.1%) and Other fields (53.6%). Men still earned a majority of 2012 doctoral degrees in the fields of Business (56.8% male), Engineering (77.8%), Math and Computer Science (74.8%), and Physical Sciences (66.6%).

3. The middle chart above shows the **gender breakdown for master's degrees awarded in 2012**, and the gender disparity in favor of females is significant – women earned just under 60% of all master's degrees in 2012, which would also mean that women earned 146.9 master's degrees last year for every 100 degrees earned by men. Like for doctoral degrees, women outnumbered

men in the same 7 out of the 11 fields of graduate study and in some of those fields the gender disparity was huge. For example, women earned more than 418 master's degrees in health sciences for every 100 men, and more than 300 master's degrees in both education and public administration for every 100 men.

4. The bottom chart above displays **total enrollment in 2012 by gender and field for all graduate school programs in the US** (both master's and doctoral levels), showing that there is a significant gender gap in favor of women for students attending graduate school. Women represent 58.5% of all graduate students in the US, meaning that **there are now 141 women enrolled in graduate school for every 100 men**. In certain fields like Education (74.5% female), Health Sciences (77.9% female) and Public Administration (75.5%), women outnumber men by a factor of almost three or more. By field of study, women enrolled in graduate school outnumber men in the same 7 out of the 11 graduate fields of study noted above, with females being a minority share of graduate students in only Business (44.8% female), Engineering (23.3% female), Math and Computer Science (29.1% female), and Physical Sciences (37.2% female).

MP: Here's my prediction – the facts that: a) men are underrepresented in graduate school enrollment overall (100 men were enrolled in 2012 for every 141 women), b) men received fewer master's (40.5% of the total) and doctoral degrees (47.8% of the total) than women in 2012, and c) men were underrepresented in 7 out of 11 graduate fields of study at both the master's and doctoral levels last year will get no attention at all from the media, universities and anybody in the higher education industry.

Additionally, there will be no calls for government studies, or increased government funding to address the significant gender disparities in graduate schools, and nobody will refer to the gender graduate school enrollment and degree gaps favoring women as a problem or a “crisis.” Further, neither President Obama nor Congress will address the gender graduate enrollment and

degree gaps by invoking the Title IX gender-equity law, like they have threatened to do for the gender gap in some college math and science programs. And there won't be any executive orders to address the huge gender disparity in graduate schools by creating a White House Council on Boys and Men like the executive order issued by President Obama in 2009 to create the "White House Council on Women and Girls." Finally, despite their stated commitment to "gender equity," the hundreds of university women's centers around the country are unlikely to show any concern about the significant gender inequities in graduate school enrollment and degrees, and universities will not be allocating funding to set up men's centers or create graduate scholarships for men.

Bottom Line: If there is any attention about gender differences in the CGS annual report, it will likely be about the fact that women are a minority in 4 of the 11 fields of graduate study including engineering and computer science (a gender gap which some [consider to be a "national crisis"](#)), with calls for greater awareness of female under-representation in STEM graduate fields of study and careers (except for the STEM field of biology, where women are *over-represented*). But don't expect any concern about the fact that men have increasingly become the second sex in higher education. The concern about gender imbalances will remain extremely selective, and will only focus on cases when women, not men, are underrepresented and in the minority.

[Higher education](#)