

# Gender Equity



in Higher Education: 2006



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By Jacqueline E. King

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American Council on Education

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# Executive Summary

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In 2000, the American Council on Education (ACE) published *Gender Equity in Higher Education: Are Male Students at a Disadvantage?* The purpose of this publication was to aid campus leaders in analyzing and responding to the gender equity issue. The report took a detailed look at the educational achievement of men and women in the United States, disaggregating key indicators by race/ethnicity, age, and income to determine where the gender gap existed, where it was widest, and where concerns about men appeared to be justified or misplaced. *Gender Equity in Higher Education: 2006* updates most of the data from the 2000 report and contains new and more detailed analyses of college enrollment. It also reviews some of the most commonly proffered explanations for the gender gap and suggests questions that campuses should ask about their own student populations.

The most striking change since 2000 is the widening gender gap among white and Hispanic traditional-age undergraduates (aged 24 or younger), due primarily to a larger female share among low-income whites and low- and middle-income Hispanics. These changes have led to an overall decline in the male share of traditional-age students from 48 percent in 1995–96 to 45 percent in 2003–04. Among the 40 percent of undergraduates who are aged 25 or older, women outnumber men by almost a two to one margin. Despite continued growth in the percentage of female undergraduates, the *number* of bachelor's degrees awarded to men is on the rise, as it is for women. As in 2000, it does not appear that women's success is coming at the expense of men, but rather that women's college participation is rising faster than men's. The story is one of increasing educational attainment for women of all races and ethnicities and for men of color, but no less attainment by white men.

## HIGHLIGHTS FROM *GENDER EQUITY IN HIGHER EDUCATION: 2006*

- The most striking change since 2000 is the widening gender gap among white and Hispanic traditional-age undergraduates (aged 24 or younger), due primarily to a larger female share among low-income whites and low- and middle-income Hispanics.
- These changes have led to an overall decline in the male share of traditional-age students from 48 percent in 1995–96 to 45 percent in 2003–04.
- Among the 40 percent of undergraduates who are aged 25 or older, women outnumber men by almost a two to one margin.
- Despite continued growth in the percentage of female undergraduates, the *number* of bachelor's degrees awarded to men is on the rise, as it is for women.
- As in 2000, it does not appear that women's success is coming at the expense of men, but rather that women's college participation is rising faster than men's.



# Introduction

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Since the late 1990s, policy analysts, self-help authors, and the media, among others, have pointed to a growing educational gender gap between girls and boys, and men and women. In 2000, the American Council on Education (ACE) published *Gender Equity in Higher Education: Are Male Students at a Disadvantage?* The purpose of this publication was to aid campus leaders in analyzing and responding to the gender equity issue. The report took a detailed look at the educational achievement of men and women in the United States, disaggregating key indicators by race/ethnicity, age, and income to determine where the gender gap existed, where it was widest, and where concerns about men appeared to be justified or misplaced. That report found:

There is not a generalized educational crisis among men, but there are pockets of real problems. In particular, African-American, Hispanic, and low-income males lag behind their female peers in terms of educational attainment and are far outpaced by white, Asian-American, and middle-class men and women. (King, 2000, p. 2)

How has the situation changed since 2000? In 2003, ACE issued a short update to its 2000 report. That update suggested that African-American men appeared to be making progress in closing the gender gap, but that Hispanic and white men were falling further behind their female peers. However, the short time horizon between the original report and the 2003 update made it difficult to draw firm conclusions.

With the passage of three more years, it is now possible to discern new trends in some of the most common indicators of educational achievement. This report updates most of the data from the 2000 report and contains new and more detailed analyses of college enrollment. It also reviews some of the most commonly proffered explanations for the gender gap and suggests questions that campuses should ask about their own student populations.



# Gender Gaps Along the Educational Pipeline

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The 2000 report included national indicators of educational participation and attainment from the U.S. Census Bureau and U.S. Department of Education in the following areas:

- High school graduation.
- College enrollment.
- Preparation for college.
- Persistence and degree attainment.
- Immediate transition to college.
- Degrees conferred.<sup>1</sup>

In most cases, the data series used in the 2000 report have been updated. The analysis of enrollment by race and income has been expanded to provide a more accurate and detailed portrayal of undergraduate enrollment. This report describes both the overall trends and how circumstances have changed since 2000.

## HIGH SCHOOL GRADUATION

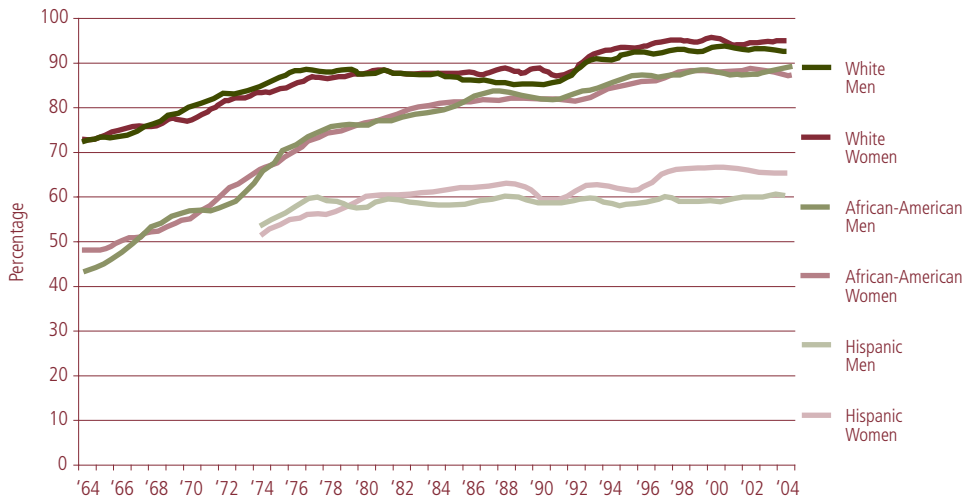
Unfortunately, no national consensus exists on how best to calculate a true high school graduation rate. There is agreement, however, that the graduation rates currently calculated by states dramatically overstate high school completion rates. Instead of reporting those flawed statistics, the 2000 report—and this update—describe the percentage of American young adults aged 25 to 29 with a high school diploma, GED, or other similar credential. This statistic provides a basic overview of educational attainment over time, but does not measure school performance or the variability in the share of young people who complete a regular high school diploma on time.

Since the mid-1960s, the percentage of Americans aged 25 to 29 with a high school credential has been virtually equal for men and women, never differing by more than 3 percentage points.<sup>2</sup> The real differences are among the major racial and ethnic groups (see **Figure 1**, on page 4). For example, among Hispanics, women aged 25 to 29 have become somewhat more likely than men to hold a high school credential since the late 1990s. The most significant gap, however, is

<sup>1</sup> No single database tracks changes over time in education participation and attainment by gender, race/ethnicity, age, and income. This paper draws on numerous sources of data. Because multiple data sets are used, the figures in this report will not match exactly. However, the basic trends suggested by these various data sets are complementary.

<sup>2</sup> All statistics from the U.S. Census Bureau cited in this report exclude individuals who are incarcerated or in the U.S. military and living on post without their families. Because men make up the majority of both groups, these statistics may overstate educational attainment for men. Prior to 1993, data reflect persons who had completed at least four years of high school, regardless of whether they had earned a diploma.

Figure 1. Percentage of Americans Aged 25 to 29 with a High School Diploma or Equivalent, by Race/Ethnicity and Gender: 1964 to 2004



Note: To reduce year-to-year variability due to sampling error, a three-year running average is used for African Americans and Hispanics. Also, the Census Bureau did not begin collecting data on Hispanics until 1974.  
 Source: U.S. Census Bureau, March Current Population Surveys: 1964 to 2004.

between Hispanics of both genders and the rest of the population.<sup>3</sup> Despite the moderate amount of improvement among Hispanic women, the gap between Hispanics and the rest of the population has actually widened since the 1970s. On the other hand, African Americans of both sexes have made major progress since the mid-1960s. The percentages of both whites and African Americans of both sexes who have a high school credential exceed 85 percent, and this has been the case since the mid-1990s. There has been no significant change in any of these patterns since the 2000 report.

### PREPARATION FOR COLLEGE

Research has shown that one of the best predictors of both enrollment and success in college is the rigor of the high school curriculum.<sup>4</sup> One standard measure of curricular rigor is the “New Basics” curriculum. Since 1982, the U.S. Department of Education has collected statistics on the percentage of high school graduates completing this curriculum, which consists of four years of

<sup>3</sup> All statistics from the U.S. Census Bureau cited in this report refer only to residents of the 50 states and the District of Columbia. They do not include Puerto Rico or any other outlying area. Individuals were not excluded based on immigration status, and no questions were asked about this topic, so it is likely that the statistics include an unspecified number of undocumented immigrants.

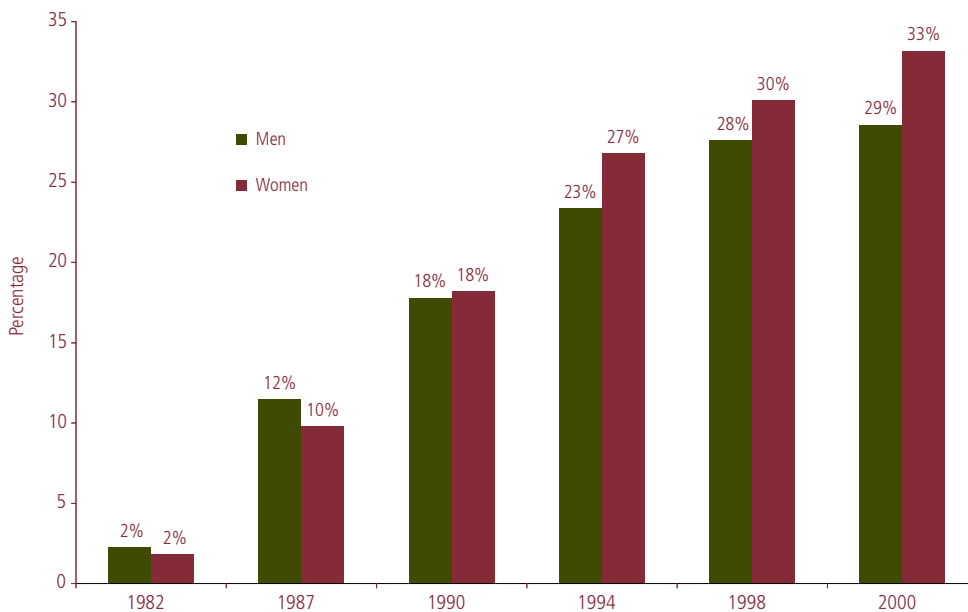
<sup>4</sup> Adelman, C. (2006). *The toolbox revisited: Paths to degree completion from high school through college*. Washington, DC: U.S. Department of Education.

English; three years each of social science, math, and science; two years of a foreign language; and a semester of computer science. The percentage of high school seniors completing these courses has grown steadily, rising from 2 percent in 1982 to 31 percent in 2000. Since 1994, there has been a two- to four-point difference in the percentage of young men and young women completing the New Basics curriculum (see **Figure 2**). This gap is consistent with differences in the share of young men and women completing key math and science courses in high school. Girls are more likely than boys to have taken most college preparatory math and science courses, with the important exceptions of physics and calculus.

### IMMEDIATE COLLEGE ENTRANCE

Taken alone, it is difficult to determine whether the seemingly small differences in course-taking patterns revealed in Figure 2 reflect a serious problem. One indicator of whether boys are falling behind in high school is the rate at which high school graduates immediately enroll in college. Certainly, many adults enter higher education later in life, but research has consistently shown

Figure 2. Percentage of High School Graduates Completing the "New Basics" College Preparatory Curriculum, by Gender: Selected Years, 1982 to 2000



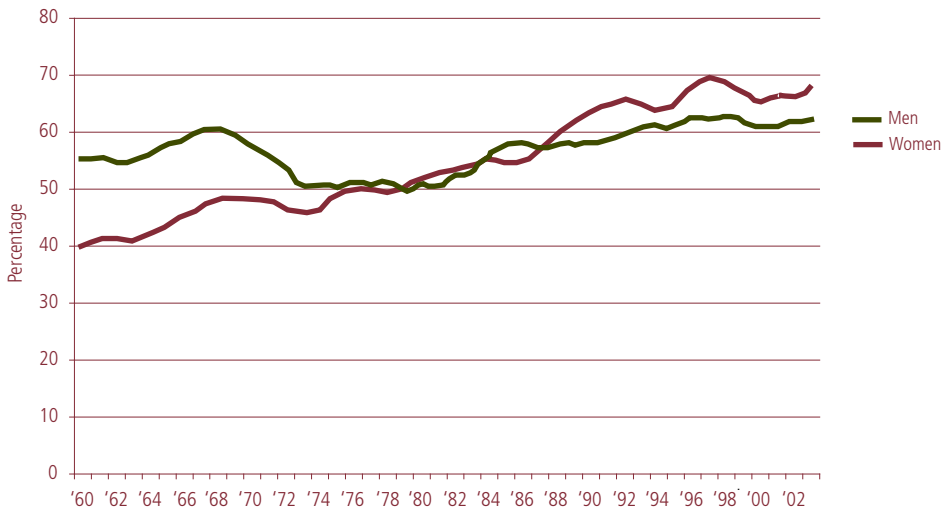
Note: In all figures, data are rounded, creating small differences in bar height.

Source: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics: 2004*.

that students who enroll in college immediately after high school have higher rates of retention and graduation than students who delay enrollment.<sup>5</sup>

**Figure 3** tracks the rate at which high school graduates in a given year enroll in college by October of the same year. Due to small sample sizes, this indicator is subject to significant year-to-year variation. Nonetheless, some general patterns are apparent. For young men, Figure 3 shows that immediate college entrance rates declined at the end of the Vietnam War era, when obtaining a draft deferment for college enrollment ceased to be a concern, then began rising slowly in the mid-1990s to return to Vietnam War–era levels. For women, the story has been one of steady improvement, with women now more likely than men to enroll in college immediately after high school. Perhaps the larger share of young women taking a college preparatory curriculum during the 1990s and 2000s has contributed to this trend.

Figure 3. Percentage of High School Graduates Immediately Enrolling in College, by Gender: 1960 to 2003



Note: To reduce year-to-year variability due to sampling error, a three-year running average is used.

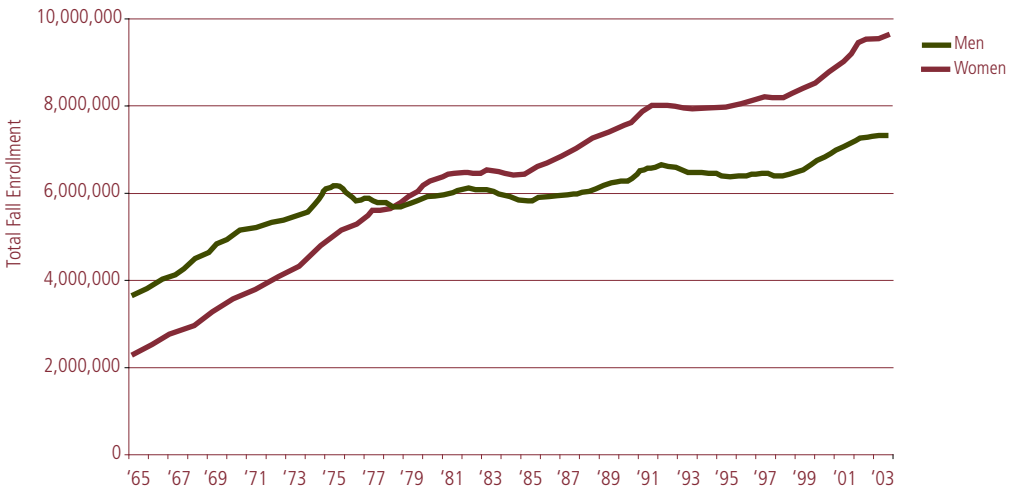
Source: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics: 2004*.

<sup>5</sup> Horn, L., Cataldi, E. F., & Sikora, A. (2005). *Waiting to attend college: Undergraduates who delay their postsecondary enrollment*. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

## COLLEGE ENROLLMENT

In fall 2003, 9.6 million women and 7.3 million men enrolled for credit in higher education at all levels (see **Figure 4**). For both groups, the 2003 levels represent growth of more than 10 percent over enrollment only five years earlier. However, the number of men enrolled did not increase fast enough to narrow what is now a 57 percent female majority in total enrollment.

Figure 4. Total Fall Enrollment in Degree-Granting Institutions of Higher Education, by Gender: 1965 to 2003



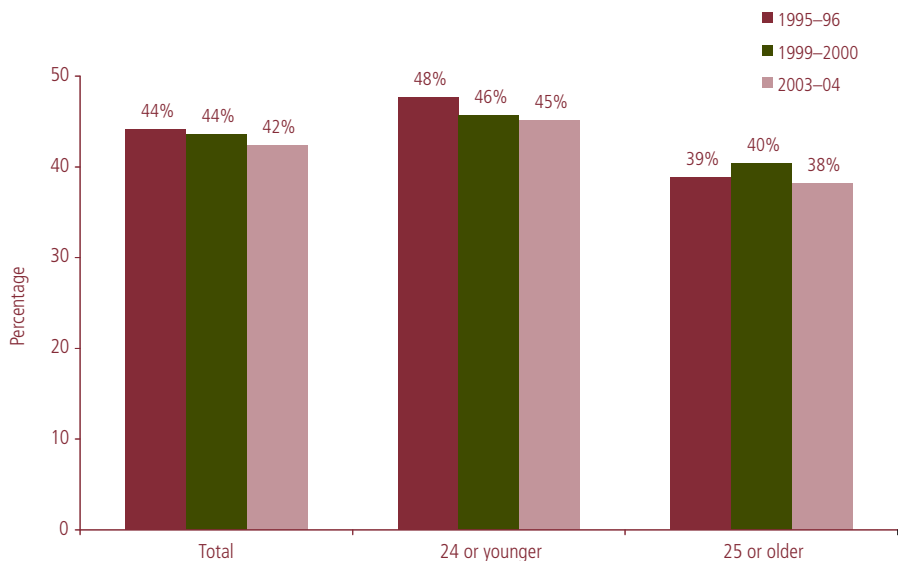
Source: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics: 2004*.

According to the most recent National Postsecondary Student Aid Study (NPSAS), men comprised 42 percent of total enrollment at the graduate level in 2003–04, but the gender balance varied tremendously by degree program and field of study. Men still are the majority in theology (77 percent), MBA (59 percent), noneducation doctorate (55 percent), law (54 percent), and master’s of science (52 percent) programs. Women hold the largest majorities in education programs (80 percent at the master’s level and 64 percent at the doctoral level), but also have made strides in traditionally male fields. Women now have a slight majority in enrollment in medicine (51 percent) and other health science professional programs (53 percent).<sup>6</sup>

<sup>6</sup> Health science professional degrees other than medicine include fields such as pharmacy, optometry, dentistry, and veterinary medicine, but exclude nursing as well as occupational and physical therapy.

The percentage of all undergraduates who are male has dropped from 44 percent in 1995–96 to 42 percent in 2003–04 (see **Figure 5**). As among graduate students, this summary statistic masks considerable variation, but in the case of undergraduates, race/ethnicity, age, and income are the more salient variables. The 2000 report demonstrated that women are a sizable majority among the 40 percent of undergraduates who are aged 25 or older. This finding has not changed; women have maintained a 60 to 62 percent majority among students aged 25 and older since the 2000 study. The size of the older student population varies by race/ethnicity, as does the size of the female majorities within those populations.<sup>7</sup> In 2003–04, students aged 25 or older made up 50 percent of both the African-American and American Indian undergraduate populations, and women accounted for nearly 70 percent of these students—a larger proportion than for any other group (see **Table 1**). Indeed, within these two racial/ethnic groups, women aged 25 and older make up a larger share of the total undergraduate population than younger women. Even among the white and Asian-American undergraduate populations, in which younger students predominate, older women make up 20 percent of undergraduate enrollment. Although most media and policy attention is focused on traditional-age undergraduates, any

Figure 5: Percentage of All Undergraduates Who Are Male, by Age:  
1995–96, 1999–2000, and 2003–04



Note: In each year, students aged 25 or older were approximately 40 percent of the undergraduate population. Source: U.S. Department of Education, National Center for Education Statistics, National Postsecondary Student Aid Studies: 1995–96, 1999–2000, and 2003–04.

<sup>7</sup> Beginning in 2000, individuals responding to all federal surveys had the option of selecting more than one race. This change was implemented in the 2003–04 NPSAS study. Only 2 percent of respondents to this NPSAS survey chose more than one race, so it is unlikely that this change had a major impact on the results of the analyses presented in this report.

Table 1. Undergraduates by Age, Race/Ethnicity, and Gender: 2003–04

	24 or Younger			25 or Older		
	Total (%)	Men (%)	Women (%)	Total (%)	Men (%)	Women (%)
White	63	29	34	37	15	22
African American	50	20	30	50	16	34
Hispanic	61	26	35	39	15	24
Asian American	65	32	33	35	14	21
American Indian	49	21	28	51	16	35
<b>All Students</b>	<b>61</b>	<b>28</b>	<b>34</b>	<b>39</b>	<b>15</b>	<b>24</b>

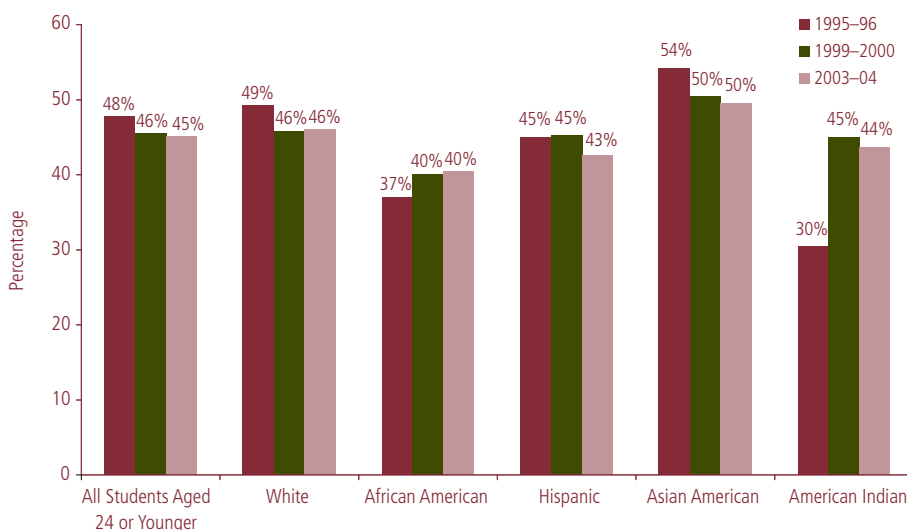
Source: U.S. Department of Education, National Center for Education Statistics, National Postsecondary Student Aid Study: 2003–04.

discussion of the undergraduate gender gap must acknowledge the influence of older women on the overall trends.

Men aged 25 or older represent only 15 percent of undergraduates, with little variation by race/ethnicity. Given the demands of the knowledge economy, an important question receiving scant attention is, Why are men less likely than women to enter (or re-enter) higher education later in life? Perhaps the higher salaries that men of all education levels continue to command in the labor market depress enrollments, or men are less willing to reduce the amount they work (and earn) in order to pursue higher education, but additional research is needed.

As reflected in Figure 5, the female majority has grown among undergraduates aged 24 or younger since 1995–96, rising from 52 percent to 55 percent. This change is primarily attributable to a widening gender gap among whites and Hispanics (see **Figure 6**, on page 10). Among white undergraduates aged 24 or younger, a clear female majority has emerged since 1995–96, with the male share of undergraduates dropping from 49 percent in 1995–96 to 46 percent in 2003–04. Among Hispanics, the percentage of undergraduates aged 24 or younger who are male fell from 45 percent to 43 percent. African-American males have actually seen some progress, with their share of enrollment rising from 37 percent to 40 percent, but the gender gap is still largest in this racial group. Asian-American men, who had been in the majority in 1995–96, now are at parity with their female peers. The data on the small number of American Indian undergraduates aged 24 or younger probably are misleading. In 1995–96, the NPSAS study found that only 30 percent of American Indian undergraduates in this age group were men. In 2003–04, that number rose to 44 percent. Most likely, the 30 percent figure was inaccurate due to low sample size and should have been at least somewhat higher.

Figure 6: Percentage of Undergraduates Aged 24 or Younger Who Are Male, by Race/Ethnicity: 1995–96, 1999–2000, and 2003–04



Source: U.S. Department of Education, National Center for Education Statistics, National Postsecondary Student Aid Studies: 1995–96, 1999–2000, and 2003–04.

The final factor examined in 2000 was income for students aged 24 or younger. In order to improve the accuracy of the data, and to account for trends since the original report, income is presented separately in this update for dependent and independent students.<sup>8</sup> Because of significant differences in family structure and income between these two groups, these analyses are conducted using distinct methods. See Appendix II on page 25 for a full explanation of the methods used and rationales for those selections.

**Table 2** compares the percentage of dependent undergraduates who are male by race/ethnicity for the lowest family income quartile, middle 50 percent, and highest quartile in three academic years: 1995–96, 1999–2000, and 2003–04. Half of all undergraduates were dependent students in 2003–04.<sup>9</sup> Table 2 demonstrates that, at least for dependent students, as income rises, the gender gap diminishes. This pattern is consistent over time and across racial/ethnic groups. In many cases, there is no clear pattern of change across the three years studied, but there

<sup>8</sup> All undergraduates aged 24 or younger who are single, have no children, and are not either veterans or wards of the court are considered dependent in the eyes of federal financial aid policy and the NPSAS study. All undergraduates aged 25 and older, as well as younger undergraduates who are married, have children, or are veterans or wards of the court are considered independent.

<sup>9</sup> U.S. Department of Education, National Center for Education Statistics. National Postsecondary Student Aid Study: 2003–04. Analysis by author.

Table 2. Percentage of Dependent Undergraduates Who Are Male, by Race/Ethnicity and Income: 1995–96, 1999–2000, and 2003–04

	Lowest Quartile			Middle Quartiles			Highest Quartile		
	1995–96 (%)	1999–2000 (%)	2003–04 (%)	1995–96 (%)	1999–2000 (%)	2003–04 (%)	1995–96 (%)	1999–2000 (%)	2003–04 (%)
White	48	43	44	48	46	47	50	48	51
African American	41	40	42	45	48	44	41	51	54
Hispanic	46	44	43	42	52	46	47	52	51
Asian American	46	48	48	47	49	52	54	54	54
<b>All Students</b>	<b>46</b>	<b>44</b>	<b>44</b>	<b>47</b>	<b>47</b>	<b>47</b>	<b>50</b>	<b>49</b>	<b>52</b>

Note: Income quartiles based on total U.S. families with householders aged 35 to 64 in 1994, 1998, and 2002, as collected by the U.S. Census Bureau in its annual Current Population Survey. See Appendix II for more information. Shaded data should be interpreted with caution due to high standard errors.

Source: U.S. Department of Education, National Center for Education Statistics, National Postsecondary Student Aid Studies: 1995–96, 1999–2000, 2003–04.

are important exceptions in which a trend is evident. Among low-income students, the female majority grew for whites and Hispanics. Among middle-income students, the percentage of Hispanic and Asian-American students who are male increased. No significant changes occurred among students in the highest income quartile, in which men and women are at parity or men have a small majority.

The picture is somewhat different for the 50 percent of undergraduates who are independent students. **Table 3** presents the percentage of independent students who are male, by income

Table 3. Percentage of Independent Undergraduates Who Are Male, by Race/Ethnicity and Income: 2003–04

	Lowest Quartile (%)	Middle Quartiles (%)	Highest Quartile (%)
White	39	39	41
African American	32	29	40
Hispanic	34	36	42
Asian American	45	39	40
<b>All Students</b>	<b>36</b>	<b>37</b>	<b>41</b>

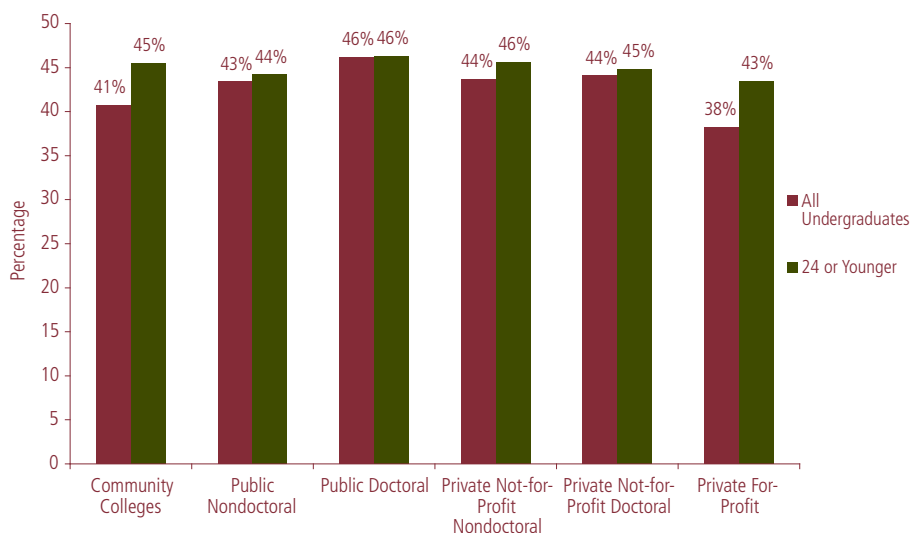
Note: Income quartiles based on distribution of independent students by income equivalency to the federal poverty threshold. See Appendix II for more information.

Source: U.S. Department of Education, National Center for Education Statistics, National Postsecondary Student Aid Study: 2003–04.

quartile, for 2003–04. As among dependent students, as independent students' incomes rise, the size of the gender gap shrinks.<sup>10</sup> However, among independent students, women still hold a significant majority at every income level and within each racial/ethnic group. The size of the female majority ranges from 55 percent among Asian Americans in the lowest income quartile to 71 percent among African Americans in the middle quartiles.

The 2000 report did not analyze the gender gap by institution type. This update adds this information. **Figure 7** shows that the size of the gender gap varies by institution type, but perhaps not as dramatically as one might expect. The percentage of all undergraduates who are male ranges from 38 percent at for-profit institutions to 46 percent at public doctoral institutions. For-profit institutions and community colleges are often composed of large proportions of older students, minority students, and students from low-income backgrounds, contributing to the larger female majorities at these institutions. When traditional-age students are isolated, there is even less variation by institution type. The male share of enrollment among undergraduates aged 24 or younger ranges from 43 percent at for-profit institutions to 46 percent at public doctoral and private not-for-profit nondoctoral institutions.<sup>11</sup>

Figure 7. Percentage of Undergraduates Who Are Male, by Institution Type and Student Age: 2003–04



Source: U.S. Department of Education, National Center for Education Statistics, National Postsecondary Student Aid Studies: 1995–96, 1999–2000, and 2003–04.

<sup>10</sup> The only exception to this pattern was among independent Asian-American students.

<sup>11</sup> Lack of variation in the size of the gender gap by broad institution type does not mean that the gender gap does not vary considerably among individual institutions or smaller groups of institutions.

PERSISTENCE AND BACHELOR'S DEGREE ATTAINMENT

The 2000 report included data from a federal longitudinal study of students who began college in 1989–90 that suggested that women who enter postsecondary education with the goal of attaining a bachelor's degree are more likely than men with similar ambitions to earn a degree within five years. However, the same study also found that men are more likely to still be enrolled and working toward a degree after five years, equalizing the overall persistence rates for men and women. These data also showed that differences between men and women within the major racial/ethnic groups were less substantial than differences between racial/ethnic groups. New data from a similar study of students who entered postsecondary education in 1995–96 generally echo these findings (see **Table 4**).

Table 4. Percentage of Students Who Attained a BA or Were Still Enrolled After Five Years, by Race/Ethnicity and Gender: 1989–90 and 1995–96 College Entrants

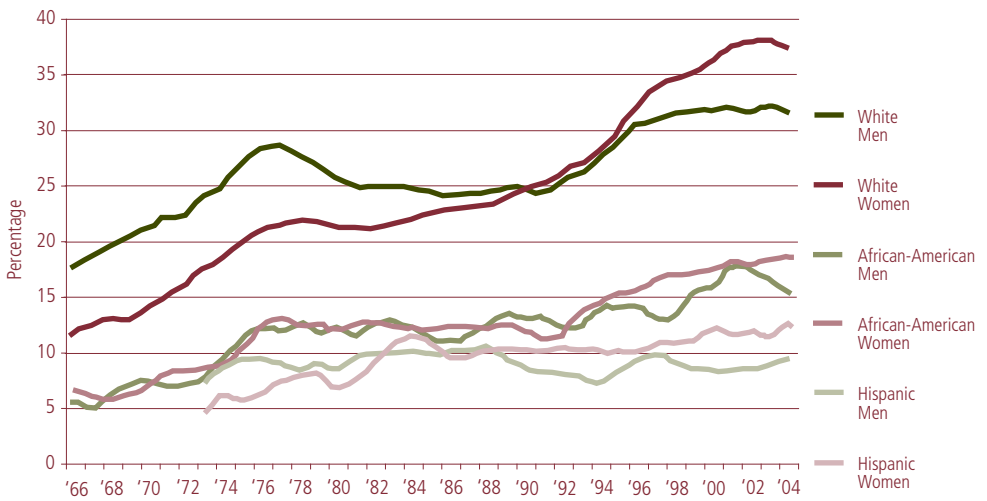
	1989–90 Entrants by 1994			1995–96 Entrants by 2000		
	Attained BA (%)	Still Enrolled (%)	Total (%)	Attained BA (%)	Still Enrolled (%)	Total (%)
White Men	33	16	49	31	18	49
White Women	38	12	50	39	11	50
African-American Men	16	15	31	15	16	31
African-American Women	24	11	35	20	13	33
Hispanic Men	19	12	31	18	11	28
Hispanic Women	29	14	43	21	13	34
<b>All Men</b>	<b>31</b>	<b>16</b>	<b>47</b>	<b>28</b>	<b>17</b>	<b>45</b>
<b>All Women</b>	<b>36</b>	<b>12</b>	<b>48</b>	<b>35</b>	<b>12</b>	<b>47</b>

Note: Includes only students who, at entrance, expressed the goal of attaining a bachelor's degree. Students may have attended any type of institution and may have never enrolled at a four-year institution.

Source: U.S. Department of Education, National Center for Education Statistics, Beginning Postsecondary Students Longitudinal Studies: 1989/1994 and 1995/2001.

Another way to examine bachelor's degree attainment is to track the percentage of Americans in a given age range who have earned at least a bachelor's degree. **Figure 8** depicts the percentage of Americans aged 25 to 29 with a bachelor's degree, by both race/ethnicity and gender, from 1966 to 2004.<sup>12</sup> This figure has two striking aspects. The first is that, despite progress by African Americans and Hispanics, the gaps between these groups and whites are larger today than they were in the 1960s and 70s. The second is that, after a spike in the mid-1970s that reflected the surge in male enrollment during the Vietnam War, the share of young white men with a bachelor's degree declined and remained flat until the early 1990s when it began to rise again. There was a similar pattern among African-American and Hispanic men, but the drop-off after the Vietnam War era was not as precipitous.

Figure 8. Percentage of Americans Aged 25 to 29 with a Bachelor's Degree, by Race/Ethnicity and Gender: 1966 to 2004



Note: To reduce year-to-year variability due to sampling error, a three-year running average is used for all groups. Source: U.S. Census Bureau, March Current Population Surveys: 1966 to 2004.

Significant gender gaps favoring women did not develop within each racial/ethnic group until the mid- to late-1990s. Since that time, the gap among whites has grown as the percentage of white women with bachelor's degrees continues to increase while the percentage of similarly educated white men has remained essentially flat. In 2004, 32 percent of white men aged 25 to 29 had at least a bachelor's degree, compared with 37 percent of white women. The data for

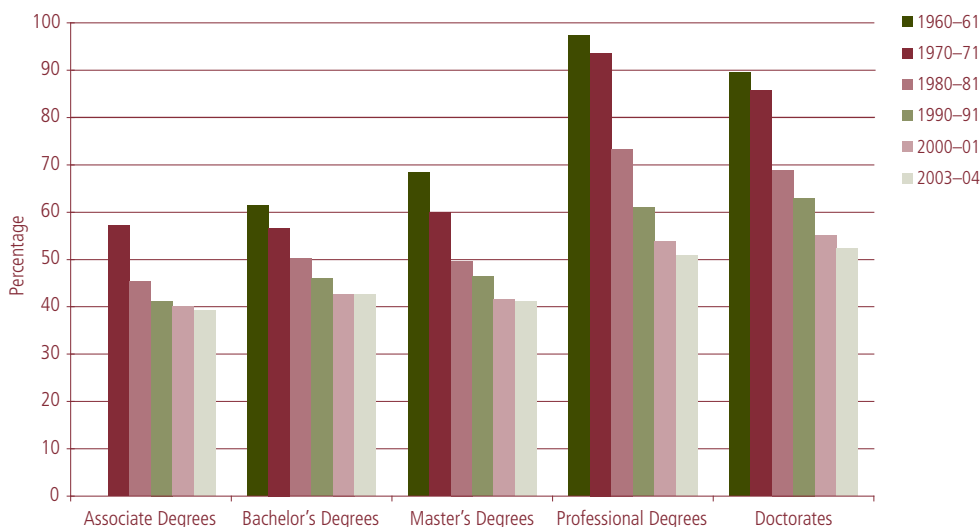
<sup>12</sup> Prior to 1993, data include all persons who had completed four or more years of college.

both African Americans and Hispanics fluctuate from year to year because of small sample sizes, but in general, the size of the gender gap is much smaller for these groups.

## DEGREES CONFERRED

One of the most quoted pieces of evidence supporting the thesis that men are in trouble is the widening disparity in the percentage of degrees conferred to men and women. At the graduate level, women have only recently earned as many doctoral and professional degrees as men (see **Figure 9**). However, more than 70 percent of students earning graduate degrees are at the master's level, where women have earned at least half of all degrees since 1980.<sup>13</sup> In large part, this female majority is due to women's predominance in education, nursing and allied health, and social work, fields that together account for 42 percent of master's degrees. Women earned three out of four master's degrees conferred in these fields in 2003–04. In the traditionally male-dominated fields of business and engineering, women earned 42 percent and 21 percent of degrees conferred, respectively.<sup>14</sup>

Figure 9. Percentage of Major Degree Types Conferred to Men:  
Selected Years, 1960–61 to 2003–04



Note: Data on associate degrees conferred in 1960–61 are not available.

Source: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics: 2004*.

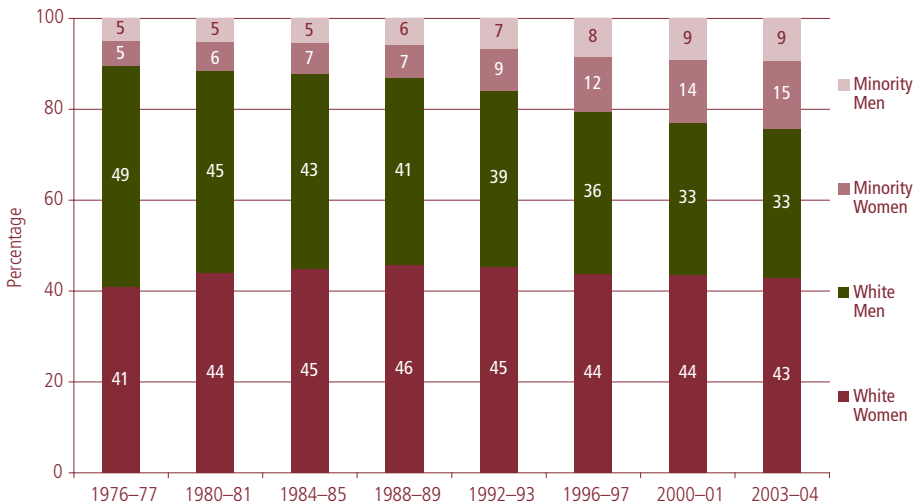
<sup>13</sup> Seventy-three percent of students completing graduate degrees in 2003–04 were in master's degree programs, 11 percent each were in doctoral programs and professional programs, and 6 percent were in post-bachelor's or post-master's certificate programs. See King, J. (2005). *Federal student loan debt: 1993 to 2004*. Washington, DC: American Council on Education. Available at [www.acenet.edu](http://www.acenet.edu).

<sup>14</sup> U.S. Department of Education, National Center for Education Statistics. 2005. *Digest of Education Statistics*, Table 265. Available at [http://nces.ed.gov/programs/digest/d05\\_tf.asp](http://nces.ed.gov/programs/digest/d05_tf.asp).

At the undergraduate level, women earn the majority of both associate and bachelor's degrees. One-third of all undergraduate degrees are at the associate level, where women have earned the majority of degrees since 1980.<sup>15</sup> Women earn the majority of degrees in the three largest fields: general education (for transfer to a four-year institution), business, and nursing/allied health. Together, these three fields account for 66 percent of all associate degrees conferred in 2003–04. Men earn the majority of associate degrees in engineering technologies and computer and information science, but together these two fields account for only 12 percent of all associate degrees conferred.<sup>16</sup>

Women have earned the majority of bachelor's degrees since 1990; in 2003–04, men earned only 42 percent of all bachelor's degrees conferred. **Figure 10** breaks down this trend by race/ethnicity since the mid-1970s. It shows that the share of bachelor's degrees earned by white women

Figure 10. Percentage Distribution of Bachelor's Degrees Conferred, by Gender and Race/Ethnicity: Selected Years, 1976–77 to 2003–04



Note: This figure excludes non-resident aliens and individuals of unknown race or ethnicity. As a result, this gender distribution differs from the distribution for all bachelor's degree recipients.

Source: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics: 2004*.

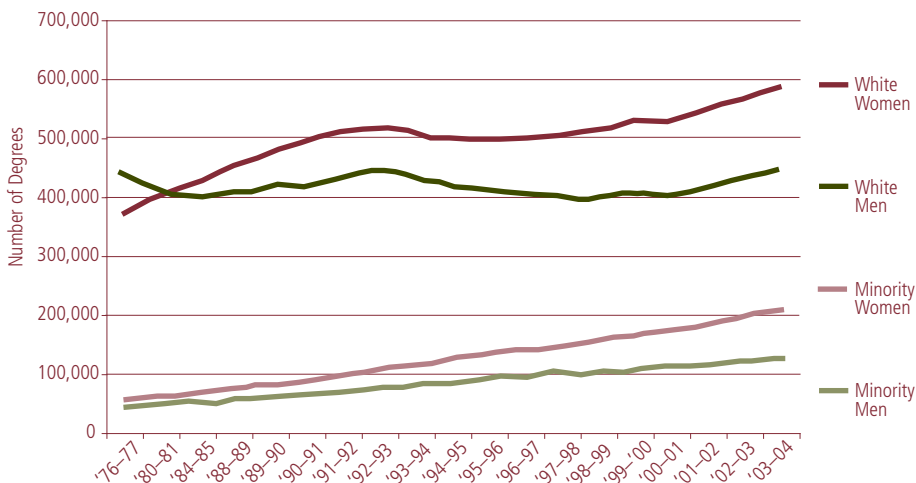
<sup>15</sup> Fifty-four percent of students completing undergraduate degrees or certificates in 2003–04 were in bachelor's degree programs, 33 percent in associate degree programs, and 13 percent were in certificate programs. See King, J. *Federal student loan debt: 1993 to 2004*.

<sup>16</sup> U.S. Department of Education, National Center for Education Statistics. 2005. *Digest of Education Statistics*, Table 259. Available at [http://nces.ed.gov/programs/digest/d05\\_tf.asp](http://nces.ed.gov/programs/digest/d05_tf.asp).

has been essentially flat since 1980–81, but that the share of degrees earned by women of color has tripled, rising from 5 percent in 1976–77 to 15 percent in 2003–04. The share of degrees earned by minority men also has gone up, but not as rapidly, rising from 5 percent in 1976–77 to 9 percent in 2003–04. The only group to see a decline in its total share of degrees conferred is white men. The share of bachelor’s degrees earned by this group has dropped from 49 percent in 1976–77 to 33 percent in 2003–04.

Does the shrinking percentage of degrees awarded to white men mean that there are fewer men earning bachelor’s degrees today than in the 1970s or that the growing attainment of degrees by women and people of color has meant less opportunity for white men? No. **Figure 11** shows that the *number* of white men earning bachelor’s degrees has been essentially flat during this period, while the number of white women, and men and women of color earning bachelor’s degrees has grown. So, the story has been one of increasing attainment for those groups, but no less attainment by white men. Further, when one computes the percentage of all white men aged 25 to 29 in America with a bachelor’s degree (as opposed to the percentage of degrees conferred), one finds that attainment has increased. Because the population of white men in this age group has declined in size since 1990, even though the *number* of degrees earned has been flat, the *percentage* of all white men in the United States with a bachelor’s degree has increased (see Figure 8).

Figure 11. Number of Bachelor’s Degrees Conferred, by Race/Ethnicity and Gender: 1976–77 to 2003–04



Source: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics: 2004*.



# Possible Reasons for the Gender Gap

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There is a lot of conjecture about why women are now the majority on college campuses, and unfortunately much less research. This section does not review the many books and articles that have been written on this topic, but in the interest of providing college leaders with a sense of the debate, it does outline the major theses that have been put forward by psychologists, social commentators, educators, journalists, and others. These hypotheses generally fall into three major categories: economic incentives, school effects, and social/psychological factors. It is important to note that this issue is not unique to the United States. In most Organisation for Economic Co-operation and Development (OECD) countries, women are graduating from secondary education and entering tertiary education at higher rates than men.<sup>17</sup>

The economic argument is that the wages that women with a high school diploma earn are so low that they create a special incentive for women who might not otherwise attend college out of choice or due to concerns about academic preparation or finances. According to the U.S. Census Bureau, the median income of women aged 25 to 34 who have only a high school diploma and who worked full time for the entire year in 2004 was only \$24,166.<sup>18</sup> When women who did not work full time for the entire year are included, the median income of female high school graduates drops to only \$18,647. Men in the same age range with a high school diploma do not fare well, but their median income of \$30,366 may be high enough that it does not create a similarly powerful incentive. Further, workers in traditionally male blue-collar occupations are more likely to receive health care and other benefits than workers in traditionally female sales and service occupations, creating another incentive for women to use postsecondary education to move up the economic ladder.

Another set of hypotheses concern the differential effects of the school experience on boys and girls. Some commentators contend that schools are intentionally organized and run in a way that is biased against boys.<sup>19</sup> Others argue that the nature of the curriculum has changed, emphasizing reading and writing earlier and more intensively across grade levels, and that this change has put boys at a disadvantage because of differences in brain development and learning style.<sup>20</sup>

<sup>17</sup> OECD. (2004). *Policy brief: Education and equity*. Paris: Organisation for Economic Co-operation and Development.

<sup>18</sup> Income figures are from the U.S. Census Bureau's 2004 Current Population Survey and were retrieved from the Census Bureau web site ([www.census.gov](http://www.census.gov)). Unless otherwise noted, all figures are for full-time, year-round workers aged 25 to 34.

<sup>19</sup> See, for example, Sommers, C. H. (2000). *The war against boys*. New York: Simon & Schuster.

<sup>20</sup> See, for example, Whitmire, R. (2006, January 23). Boy trouble. *The New Republic*, pp. 15–18.

Finally, a host of social and psychological factors that may influence the gender gap are cited frequently in the media. For example, male role models such as musicians and athletes may influence boys to adopt the attitude that it is not “cool” to work hard at school. Gender differences in maturation rates may make it more difficult for boys to meet deadlines and conform to other school norms, or to manage their feelings in productive ways. As a result, boys may fall behind academically or may be diagnosed with problems such as attention deficit disorder.

Unfortunately, there is no consensus on the causes of the gender gap and little comprehensive empirical research upon which to base firm conclusions. However, the range of possible explanations suggests that this issue is complex and multidimensional. Further, the fact that many industrialized countries see similar patterns suggests the problem and its root causes are not uniquely American. Not only are the possible causes of the gender gap complex, but also the relative influence of these causes likely differs depending on the race, ethnicity, age, and socio-economic status of students. This makes diagnosing the problem and designing effective interventions that much more difficult.

# Conclusion

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The issue of male achievement in higher education is real and important. As detailed in this report, at the undergraduate level, older men of all races, ethnicities, and incomes—and younger men of all races and ethnicities from low- and middle-income backgrounds (with the important exception of Asian Americans)—are in the minority on college campuses. Further, the gender gap has increased since the 2000 report for one of the most vulnerable populations: low-income traditional-age students. The gender gap is important and should be addressed by educators and policy makers, but it should not obscure the larger disparities that exist by income and race/ethnicity for students of both genders. Likewise, the fact that the rate of degree attainment is rising for both women *and men* should remind everyone concerned about male achievement that education is not a zero-sum game in which women's success results in losses for men.

It is important to examine the gender gap within this context and to target our efforts at reaching those low-income, minority, and older men who are in greatest need of assistance. Colleges and universities can begin this work by identifying those groups of men who are not making it to their campuses and who are struggling once they arrive, and then tailoring outreach and programmatic interventions to their unique needs. The questions for institutional research listed in Appendix I may help institutions begin this work.



# Appendix I: Questions for Institutional Research

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1. What is the graduation rate in the high schools from which you draw most of your students? How does the rate differ by race/ethnicity and gender?
2. If you operate college outreach programs, what is the gender and race/ethnicity breakdown in these programs? What share of these students eventually apply for and enroll at your institution, by race/ethnicity and gender?
3. What is the profile of your applicant pool by age, race/ethnicity, and gender? If you have a gender gap, is it due to underrepresentation among specific groups of men (e.g., low-income men, men of color, older men, upper-income white men)? How has this profile changed over time?
4. How does the academic preparation of your applicants and enrolled students vary by race/ethnicity, gender, and income? Do remediation rates differ by these factors?
5. What is the profile of your enrolled undergraduate and graduate students by age, race/ethnicity, and gender? If you have a gender gap, is it due to underrepresentation among specific groups of men (e.g., low-income men, men of color, older men, upper-income white men)? How has this profile changed over time?
6. Is there an unusually large or small gender gap in any of your academic programs? What might account for these statistics?
7. What is the gender breakdown in your adult or continuing education programs?
8. Is your enrollment profile significantly different from the national statistics presented here or from state-level statistics available from the U.S. Department of Education?
9. What, if any, academic or social problems has a campus gender gap created or exacerbated?
10. Do persistence or graduation rates vary by race/ethnicity, gender, income, or age?
11. What are the trends in undergraduate and graduate degrees conferred? How have both the number of degrees and the share of degrees awarded to men and women of varying backgrounds changed? How do these statistics compare with national data?
12. What are the trends in degrees conferred by level and field? Have some fields had more success in attracting male students and retaining them to graduation than others?



## Appendix II: Method for Calculating the Percentage of Undergraduates Who Are Male, by Dependency Status, Race/Ethnicity, and Income

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Instead of examining income for only undergraduates aged 24 or younger, as in the 2000 report, this report analyzes income separately based on students' dependency status.<sup>21</sup> In addition to each student's personal income, the total income figures in NPSAS include parental income for dependent students and spouse's income for those independent students who are married. As a result of this difference in the definition of total income, independent students typically have much lower income than their dependent peers.

In 2003–04, 50 percent of undergraduates were independent students. The percentage of undergraduates who are independent ranged from 44 percent among Asian Americans to 64 percent among African Americans. Given this wide range in the share of students who are independent, combining the income of dependent and independent students confuses the income picture for readers who could easily presume that parental income is always included. Further, it makes it difficult to construct consistent income bands for cross-year comparisons.

This report takes differing approaches to analyzing income for dependent and independent students. In order to accurately compare dependent students by income across the eight-year period from 1995–96 to 2003–04, it was important to peg students' income to some outside measure of the income distribution of families in the United States. In this case, the measure used was family income for U.S. families with a householder aged 35 to 64 (the range in which one might be likely to have a child aged 24 or younger), as collected by the Census Bureau in its annual Current Population Survey. In each year examined, the income quartiles reflect the distribution of all families in the United States, and therefore reflect national changes in the distribution of family income during this period. The income cutoffs for each quartile are listed in the table on the next page. In each case, income is drawn from the full calendar year preceding the academic year. For example, 1994 income is used for the 1995–96 academic year. All income is reported in current dollars (not adjusted for inflation).

<sup>21</sup> See footnote 8 for a definition of dependency status.

	Lowest Quartile	Middle 50 Percent	Highest Quartile
1995–96	Less than \$27,500	\$27,500 to \$72,499	\$72,500 or more
1999–2000	Less than \$30,000	\$30,000 to \$84,999	\$85,000 or more
2003–04	Less than \$32,500	\$32,500 to \$97,499	\$97,500 or more

Analyzing changes over time in the independent student population by income presents a number of challenges. One should analyze married and single students separately, pegging their income to distinct indicators of individual and family income in the United States. Moreover, because the vast majority of independent students lack a college degree and many have reduced the amount that they earn in order to attend college, their income tends to be lower than the income of other adults, making comparisons to the general population problematic. Because of these problems, this report presents data for independent students in 2003–04 only, dividing students into quartiles without reference to any external indicator of income distribution.

Because the income of independent students varies significantly based on their marital status, it is important to account for family composition. To do this, this report uses a variable in NPSAS that converts income into a percentage of the federal poverty threshold for a given family size. Table 3 on page 11 divides independent students into quartiles based on this NPSAS poverty variable, without tying students' income distribution to any distribution in the general population. The income values associated with these quartiles vary by family size. In 2002, the year prior the 2003–04 academic year, the income levels associated with the lowest quartile, middle 50 percent, and highest quartile for a family of two were less than \$11,020, \$11,020 to \$42,627, and \$42,628 or more, respectively. These figures are not adjusted for inflation.



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