

PIPELINES, PATHWAYS, and INSTITUTIONAL LEADERSHIP

An Update on the
Status of Women in
Higher Education

Center for Policy Research and Strategy



ACE's Center for Policy Research and Strategy (CPRS) provides thought leadership at the intersection of public policy and institutional strategy. The center produces papers, briefs, infographics, and convenings that shed light on diverse student populations and explore emergent practices in higher education with an emphasis on long-term and systemic solutions for an evolving higher education landscape and changing American demographic.

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BACKGROUND

In 2009, *The White House Project: Benchmarking Women's Leadership* was released. This groundbreaking report examined the leadership roles of women across 10 sectors of the workforce in the United States. Key findings illustrated that women in academia make up more than half of all college students, but only slightly more than a quarter of all full professors and less than 15 percent of the presidents at doctoral degree-granting institutions. It also documented that female faculty members have not made progress in closing the salary gap—women made 83 percent of what male faculty made in 1972 and only 82 percent of what male faculty made in 2009. In 2013, the Colorado Women's College at the University of Denver released the follow-up report *Benchmarking Women's Leadership in the United States*, expanding the depth and breadth of the original report.

The information presented in this infographic brief includes updated data on women in higher education leadership to a previously published version. It seeks to continue the conversation and offers updated key descriptive statistics on women in higher education in an effort to promote dialogue on how to move the needle and increase the number of women leaders.

THE PIPELINE MYTH

The **pipeline myth** is the persistent idea that there are too few women qualified (e.g., degree holding) for leadership positions. However, the data indicate that there are more than enough qualified women to fill available leadership positions. In fact, the pipeline is preparing women at a greater rate than it does men. For example, female students have earned half or more of all baccalaureate degrees for the past three decades and of all doctoral degrees for almost a decade.

2017

Women have earned more than
50%
of all **doctoral degrees**

since 2006.*

Women have earned more than

50%
of all **bachelor's degrees**

since 1982.*

2000

1990

Women have earned more than

50%
of all **master's degrees**

since 1987.*

1980

Women have earned more than

50%
of all **associate degrees**

since 1978.*

1970

* See Figures 1 a-d on pages 18-19.



GLASS CEILINGS

The **glass ceiling** is a long-standing metaphor for the intangible systemic barriers that prevent women from obtaining senior-level positions. Despite the number of female graduates available for leadership positions, women do not hold associate professor or full professor positions at the same rate as their male peers. The data show that women are not ascending to leadership roles, given that they hold a greater share of the entry-level, service, and teaching-only positions than their male counterparts. This is true for all women when looking across degree-granting postsecondary institutions; the trend is exacerbated for women of color.*

* See Table 1 on page 20.



As of 2015, women held

32% of the full professor positions at degree-granting postsecondary institutions.*

The higher the academic rank, from other faculty (service or research only) to tenured full professor, the fewer women one finds.*

Women of color often outnumber men of color in lower-ranking faculty positions, but men of color hold full professor positions more often than women of color.**

* See Figure 2 on page 19.

** See Table 1 on page 20.

THE HIGHER THE FEWER

The phrase “**the higher the fewer**” is used to recognize the fact that even though women have higher education attainment levels than men, this is not reflected in the number of women holding positions with high faculty rank, salary, or prestige. This characterization is apt when it comes to the percentage of full-time instructional faculty with tenure. Women of all races and ethnicities are more likely to hold lower ranking faculty positions.



In 2015, male faculty



members held a higher %



of tenure positions at every type of



institution even though they did not hold the



highest number of faculty positions at every rank.*

* See Table 2 on page 20.

PAY GAP



One of the clearest indicators of the glass ceiling is the persistent **pay gap** between men and women at the same faculty rank. Overall, during the 2015–16 academic year, male faculty members made an average of \$89,190, and female faculty members made an average of \$73,782.* No matter the academic rank, men make more than women and are more likely to hold a tenure track position.

* See Figure 3 on page 20.

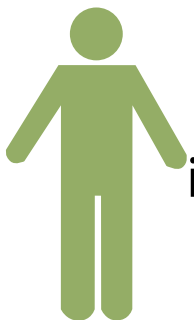
Men outearn women by:

\$13,874

at public institutions

\$18,201

at private institutions*



Men make more than women at every rank and in every institution type except two-year private institutions. At two-year private institutions, women make slightly more than their male peers, earning \$32,495 compared to \$30,050.*



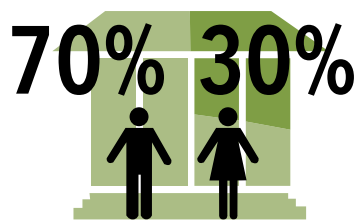
* See Figure 4 on page 21.

PRESIDENTS, CAOs, and GOVERNING BOARDS

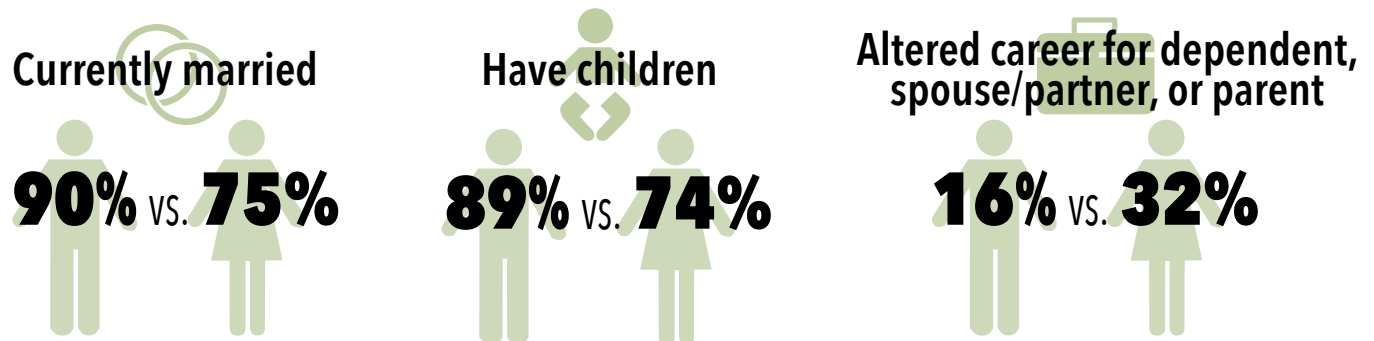
Setting aside the many myths and metaphors that address the paucity of women in postsecondary leadership positions, data on college and university presidents, chief academic officers, and governing boards provide the field an understanding of the pathways that women have taken to achieve such positions in the academy. The following pages present these important data.

Data on college and university presidents—powerful and visible leaders in American society—come from ACE’s seminal survey study on this population. Also presented are ACE data on chief academic officers or CAOs—an important position of study given their role in setting the academic direction of an institution and the fact that many CAOs aspire to the college presidency. Association of Governing Boards of Universities and Colleges data benchmark the important role of these bodies, which determine the strategic direction of higher education institutions and have oversight in selecting, hiring, and appointing key academic leaders.

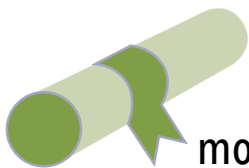
PRESIDENTS



While the number of women presidents has increased since 1986, as of 2016, women only hold 30 percent of presidencies across all institutions of higher education.*



Women presidents are less likely to be married, less likely to have children, and more likely to have altered their career to care for dependent, spouse/partner, or parent.**

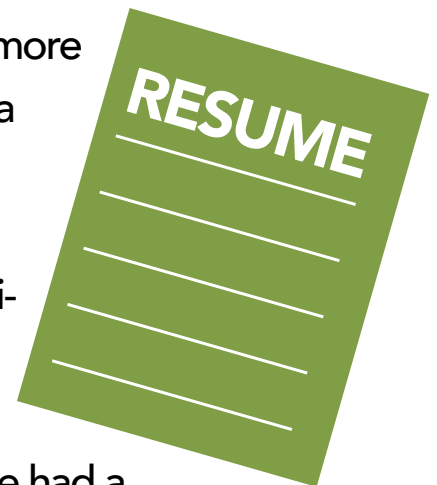


Women presidents are more likely to have a PhD or EdD than their male peers.

Education, humanities, and the social sciences were the top three fields of study among all presidents.***



Women presidents are more likely to have served as a CAO/provost or other senior executive in academic affairs. Male presidents are more likely to come from outside higher education or have had a different senior campus executive role than women presidents.****



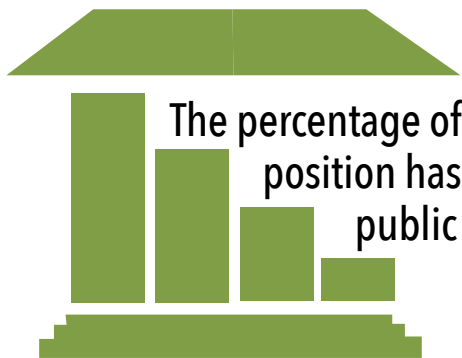
* See Table 3 on page 21.

** See Figure 5 on page 22.

*** See Figure 6 on page 22.

**** See Figure 7 on page 22.

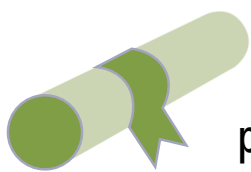
CHIEF ACADEMIC OFFICERS



The percentage of women serving in a CAO position has declined from 2008 to 2013 in public doctoral degree-granting institutions.*



Women CAOs are less likely to be married or to have children than their male counterparts.**

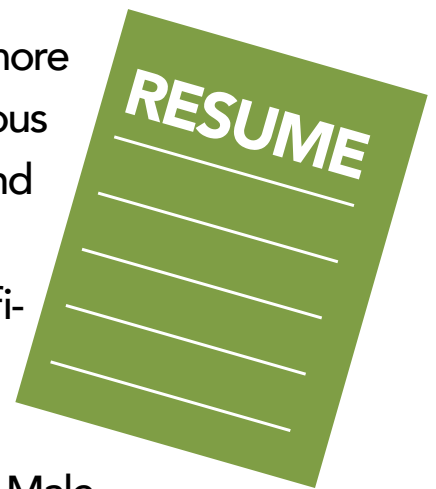


Unlike presidencies, where more women possess a PhD or EdD, male CAOs slightly lead women CAOs on possessing a doctorate.***

Similar to college presidents, the top three fields of study for CAOs are education, humanities, and social sciences.***



A woman CAO is more likely to have previous CAO experience and to have served as a senior academic officer or other senior executive outside of academic affairs. Male CAOs are more likely to have previously served as an academic dean or other campus executive in academic affairs.****



* See Table 4 on page 23.
** See Figure 8 on page 23.
*** See Figure 9 on page 24.
**** See Figure 10 on page 24.

GOVERNING BOARDS

Data show that men outnumbered women on both public and independent governing boards by more than



2 to **1**.*

The number of women holding the position of board chair has increased from 2010 and is slightly higher at public institutions when compared to private institutions.**



But, previous steady progress on governing boards has slowed with the number of female board members standing at roughly 30 percent for what has been nearly two decades.***

* See Table 5 on page 24.

** See Table 6 on page 24.

*** Association of Governing Boards 2010.

SUMMARY

Collecting and reporting on data that reveal patterns of bias is imperative to increasing the number of women in higher education leadership positions including tenured professors, deans, chief academic officers, presidents, board members, and chairs. The types of data in this infographic brief need to be tracked and reviewed regularly to help individuals, organizations, and policies from perpetuating bias. Further, search, promotion, and tenure committees and governing boards can use this information and related research to inform the hiring and promotion of faculty and administrators in an effort to chip away at the glass ceiling and engage the brains, talents, and resources of half of our population—women—in leading our nation’s colleges and universities.

MOVING FORWARD

Moving the Needle: Advancing Women in Higher Education Leadership

ACE's Leadership division is committed to increasing the number of women in higher education senior leadership positions through programs, research, and resources. Its Moving the Needle initiative is centered on the vision of having half of the chief executives at higher education institutions be women by 2030. For more information about the goals of the initiative please visit www.acenet.edu/mtn.

American College President Study 2017

ACE's Center for Policy Research and Strategy recently released the *American College President Study 2017*, the latest edition of the oldest and most comprehensive national survey of college and university presidents. These data contribute to a better understanding of the personal and professional characteristics, experiences, and trajectories of women leaders in higher education. For more information about ACPS please visit www.acenet.edu/acps2017.

ACTION STEPS

RECOMMENDED FROM COLORADO WOMEN'S COLLEGE

Benchmarking Women's Leadership in the United States, a report published by the University of Denver's Colorado Women's College, offered the following as suggestions for areas of future action to help close the leadership gap:

- The governing board and the senior staff should annually review the institution's commitment to diversity to evaluate how well it is working.
- Identify, support, and advance women and women of color to become chief academic officers, provosts, and senior executives. These positions are stepping-stones to the presidency.
- Look beyond sitting presidents in order to increase the pool of potential presidential selections. Because women are more likely to have followed a nontraditional career path, the best candidates may come from farther afield.
- Review hiring and promotion policies to ensure they are fair and equitable and do not disproportionately encumber women. For example, if the majority of non-tenure track positions do not have equal standing in promotion, and women predominantly occupy these positions, then the university must critically evaluate its hiring process.
- Evaluate the lack of tenure track hires and consider how promotion may be re-evaluated.
- Insist that pools of candidates for faculty and senior leadership positions be diverse. Women cannot get hired if they are not in the pool of candidates.
- Diversify search committees for presidential, senior leadership, and faculty positions. Often diversification on the committee helps ensure a search will be expanded to the broadest range of qualified candidates.
- Make certain search committees have data on the status and benefits of women and women of color candidates.
- If universities hire search firms, they should ensure the firms have a reputation for providing diverse pools of candidates.
- Public institutions should pay particular attention to the declining number of women leaders. Among all the sectors, academia is the only one that has this trend. Typically, public organizations, entities, and offices have a better representation of women overall.

SELECT RESOURCES

The following list provide additional information about scholars, researchers, policymakers, and organizations that are working to research, educate, and promote knowledge on women, leadership, and inclusive leadership practices.

ACE Women's Network

<http://www.acenet.edu/higher-education/topics/Pages/Gender-Equity.aspx>

American Association of University Women

www.aauw.org

WorkLife Law - UC Hastings College of the Law -Higher Education

<http://worklifelaw.org/projects/higher-education/>

American Association of University Professors

<https://www.aaup.org/issues/women-academic-profession>

Catalyst

www.catalyst.org

Institute for Women's Policy Research

<https://iwpr.org/>

National Alliance for Partnerships in Equity

<https://www.napequity.org/>

Preparing Women to Lead

www.plen.org

Collaborative to Advance Equity Through Research

<http://equitythroughresearch.com/>

Gender Justice

<http://www.genderjustice.us/>

EY Women. Fast Forward

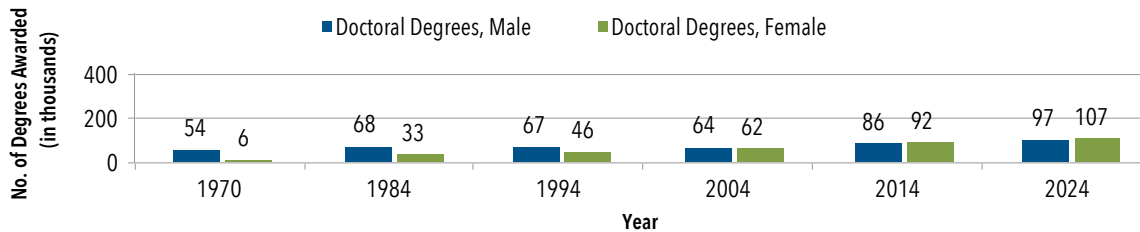
<http://www.ey.com/gl/en/issues/business-environment/women-fast-forward>

Sources

- Association of Governing Boards of Universities and Colleges. 2010. *2010 Policies, Practices, and Composition of Governing Boards of Independent Colleges and Universities*. Washington, DC: Association of Governing Boards of Universities and Colleges. <http://agb.org/reports/2010/2010-policies-practices-and-composition-governing-boards-independent-colleges-and-unive>.
- Gagliardi, Jonathan S., Lorelle L. Espinosa, Jonathan M. Turk, and Morgan Taylor. 2017. *American College President Study 2017*. Washington, DC: American Council on Education.
- Snyder, Thomas D., Cristobal de Brey, and Sally A. Dillow. 2016. *Digest of Education Statistics 2015*. NCEES 2016-014. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- U.S. Department of Education, *Digest of Education 2016*. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- University of Denver. 2013. *Benchmarking Women's Leadership in the United States*. Denver, CO: University of Denver Colorado Women's College.
- The White House Project. 2009. *The White House Project: Benchmarking Women's Leadership*. Washington, DC: The White House Project. http://www.in.gov/icw/files/benchmark_wom_leadership.pdf.

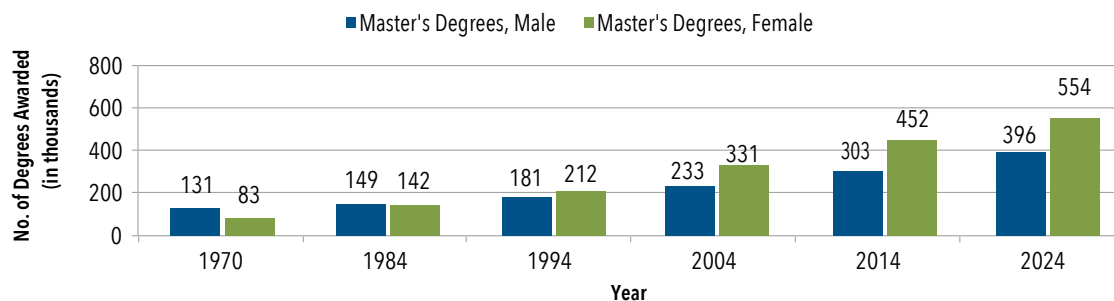
Figures and Tables

FIGURE 1 A: DEGREES AWARDED, BY SEX, 1970–2024* PROJECTED



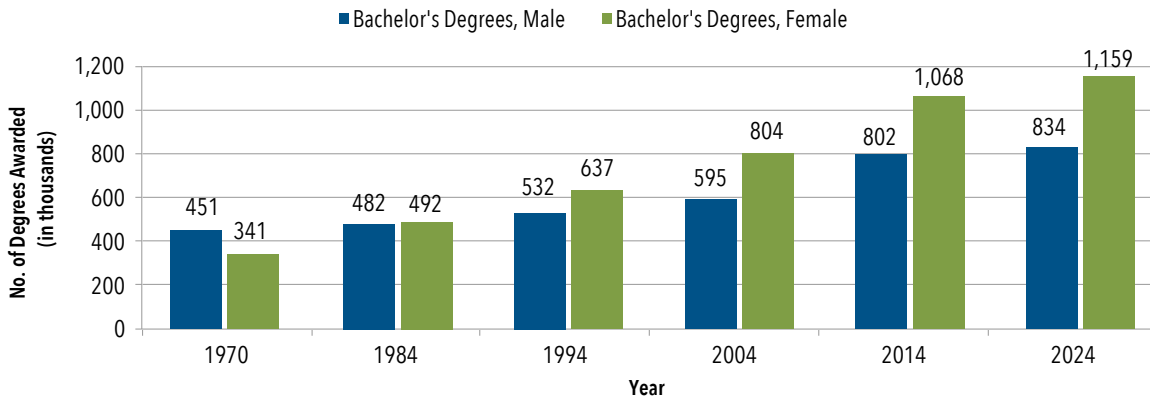
Source: U.S. Department of Education. 2015. *Digest of Education Statistics 2015*, Table 318.10. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

FIGURE 1 B: DEGREES AWARDED, BY SEX, 1970–2024* PROJECTED



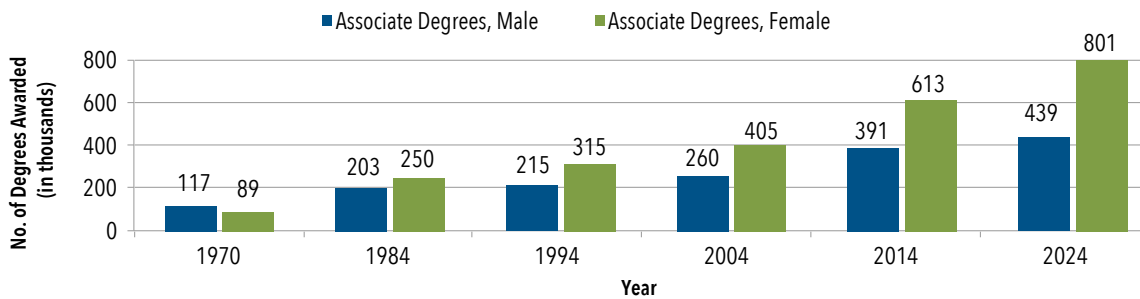
Source: U.S. Department of Education. 2015. *Digest of Education Statistics 2015*, Table 318.10. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

FIGURE 1 C: DEGREES AWARDED, BY SEX, 1970–2024* PROJECTED



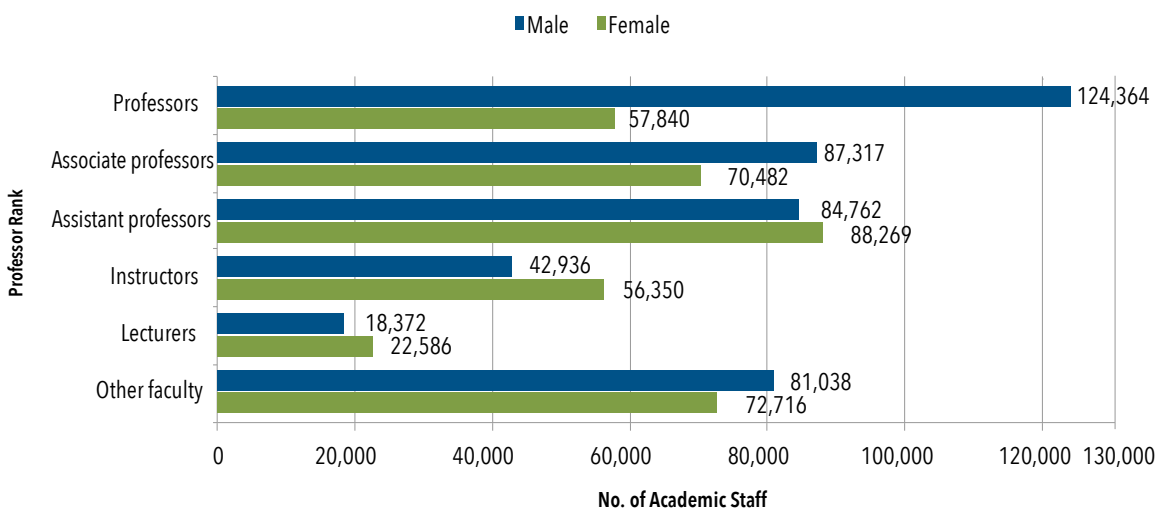
Source: U.S. Department of Education. 2015. *Digest of Education Statistics 2015*, Table 318.10. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

FIGURE 1 D: DEGREES AWARDED, BY SEX, 1970–2024* PROJECTED



Source: U.S. Department of Education. 2015. *Digest of Education Statistics 2015*, Table 318.10. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

FIGURE 2: NUMBER OF ACADEMIC STAFF MEMBERS,* BY RANK AND SEX



*Only instructional faculty were classified by academic rank. Primarily research and primarily public service faculty, as well as faculty without ranks, appear under "other faculty."

Source: U.S. Department of Education. 2016. *Digest of Education Statistics 2016*, Table 315.20. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

TABLE 1: NUMBER OF FULL-TIME FACULTY IN DEGREE-GRANTING POSTSECONDARY INSTITUTIONS, BY RACE/ETHNICITY, SEX, AND ACADEMIC RANK* (FALL 2015)

Rank	White Male	White Female	Black Male	Black Female	Hispanic Male	Hispanic Female	Asian/Pacific Islander Male	Asian/Pacific Islander Female	American Indian/ Alaska Native Male	American Indian/ Alaska Native Female	Total**
Professors	99,759	47,205	4,010	2,710	3,827	2,129	12,816	4,108	364	234	182,204
Associate professors	64,010	52,501	4,333	4,744	3,800	3,167	10,501	6,758	288	321	157,799
Assistant professors	55,186	59,808	4,171	6,679	3,692	3,923	10,263	9,158	290	349	173,031
Instructors	31,457	41,030	2,570	4,710	3,118	3,763	2,485	3,182	425	435	99,286
Lecturers	13,885	16,683	871	1,213	1,009	1,359	1,043	1,648	58	84	40,958
Other faculty	47,888	46,245	3,077	5,058	2,813	3,186	8,610	6,850	302	383	153,754

* Only instructional faculty were classified by academic rank. Primarily research and primarily public service faculty, as well as faculty without ranks, appear under "other faculty." Race categories exclude persons of Hispanic ethnicity.

** Total also includes those of two or more races, race/ethnicity unknown, and non-resident alien race/ethnicity categories.

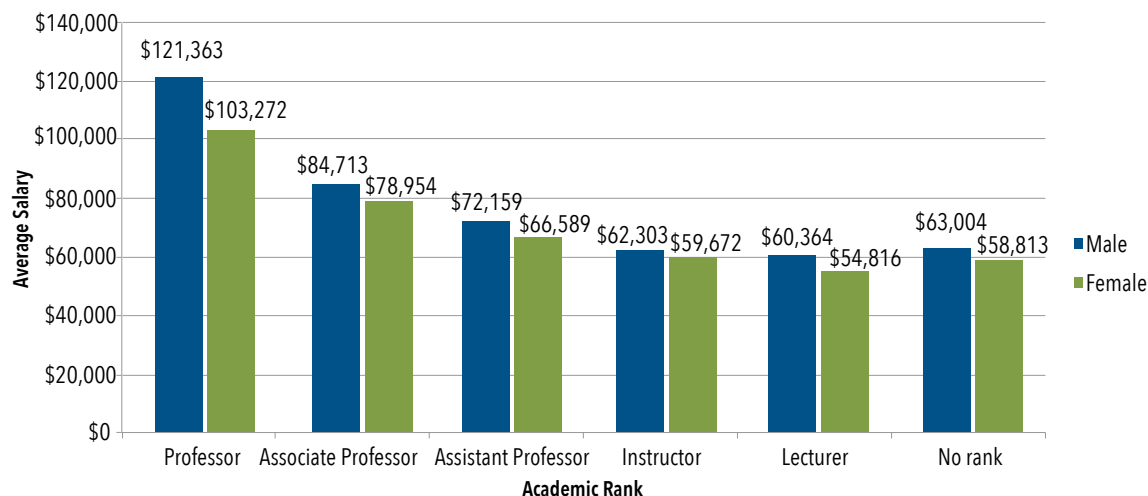
Source: U.S. Department of Education. 2016. *Digest of Education Statistics 2016*, Table 315.20. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

TABLE 2: PERCENT OF FULL-TIME INSTRUCTIONAL FACULTY WITH TENURE AT DEGREE-GRANTING POSTSECONDARY INSTITUTIONS WITH A TENURE SYSTEM, BY SEX AND INSTITUTION CONTROL AND LEVEL (2015-16)

Control and level of institutions	% of institutions with tenure system	% of Males	% of Females
All institutions	51.9	55.5	42.4
Public institutions	74.7	57.4	44.9
Four-year	95.2	55.9	40.6
Doctoral	99.6	54.6	37.4
Master's	97.6	60.7	48.2
Other	85.7	57.3	51.4
Two-year	58.8	67.5	63.1
Not-for-profit institutions	57.7	51.7	37.0
Four-year	60.6	51.7	37.0
Doctoral	79.8	48.8	32.2
Master's	60.8	57.3	45.2
Other	47.0	61.4	49.1
Two-year	7.5	46.1	25.6
For-profit institutions	1.3	18.9	15.5

Source: U.S. Department of Education. 2016. *Digest of Education Statistics 2016*, Table 316.80. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

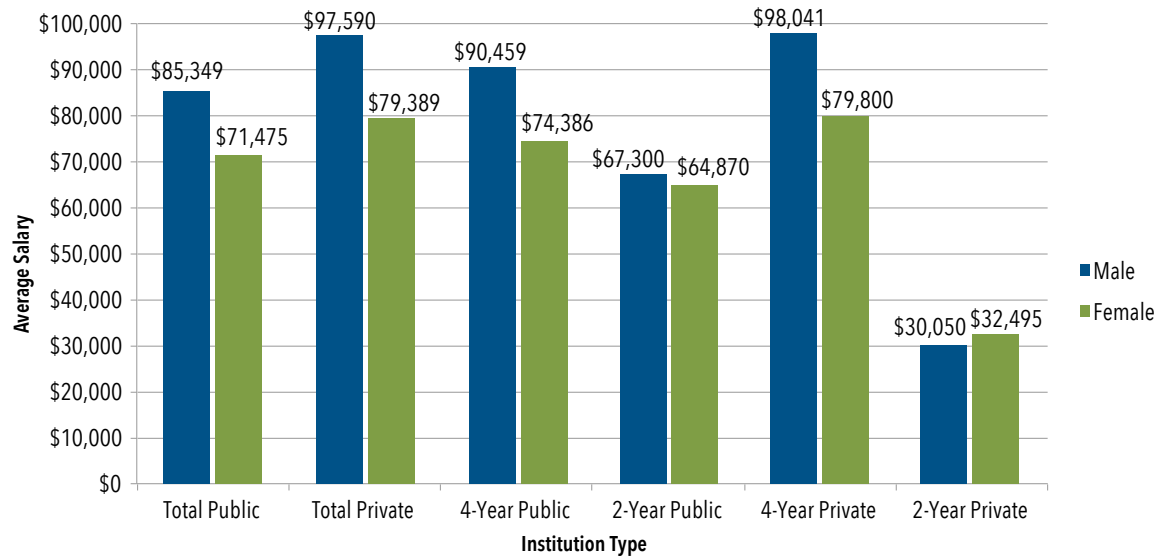
FIGURE 3: AVERAGE SALARY* OF FULL-TIME INSTRUCTIONAL FACULTY ON NINE-MONTH CONTRACTS IN DEGREE-GRANTING POSTSECONDARY INSTITUTIONS, BY ACADEMIC RANK AND SEX (2015-16)



*2015-16 constant dollars based on the Consumer Price Index, prepared by the Bureau of Labor Statistics, U.S. Department of Labor, adjusted to an academic-year basis.

Source: U.S. Department of Education. 2016. *Digest of Education Statistics 2016*, Table 316.10. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

FIGURE 4: AVERAGE SALARY* OF FULL-TIME INSTRUCTIONAL FACULTY ON NINE-MONTH CONTRACTS IN DEGREE-GRANTING POSTSECONDARY INSTITUTIONS, BY INSTITUTION TYPE AND SEX (2015-16)



* 2015-16 constant dollars based on the Consumer Price Index, prepared by the Bureau of Labor Statistics, U.S. Department of Labor, adjusted to an academic-year basis.

Source: U.S. Department of Education. 2016. *Digest of Education Statistics 2016*, Table 316.10. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

TABLE 3: PERCENTAGE OF PRESIDENCIES HELD BY WOMEN, BY INSTITUTION TYPE (2001-2016)

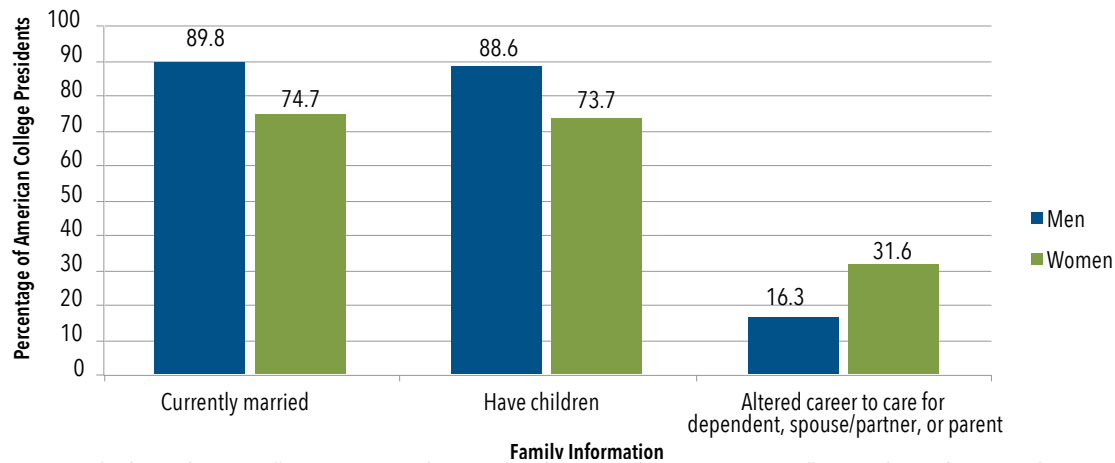
Institution Type	2001	2006	2011	2016
All institutions*				
Doctorate-granting	13.3	13.7	22.3	21.8
Master's	20.3	21.7	22.8	29.1
Bachelor's	18.7	23.3	22.9	27.9
Associate	26.8	28.7	33.0	35.8
Special focus	14.8	16.4	20.5	30.6
Total**	21.1	23.0	26.4	30.1
Public				
Doctorate-granting	15.7	16.0	23.9	23.2
Master's	20.9	23.1	22.9	30.3
Bachelor's	18.2	34.4	27.5	32.8
Associate	27.0	28.9	32.3	36.0
Special focus	22.0	29.0	21.4	40.0
Total**	23.9	26.5	29.4	32.8
Private Not-for-Profit				
Doctorate-granting	8.7	7.6	20.7	19.6
Master's	19.6	20.3	22.5	28.6
Bachelor's	18.8	21.1	22.3	26.3
Associate	27.6	34.0	40.7	34.8
Special focus	13.7	13.4	17.8	29.3
Total**	17.9	18.7	21.9	27.2

* Includes public, private not-for-profit, and private for-profit institutions

** Total includes institutions classified as "Other," which includes institutions not included in Carnegie Classification, such as some state higher education systems.

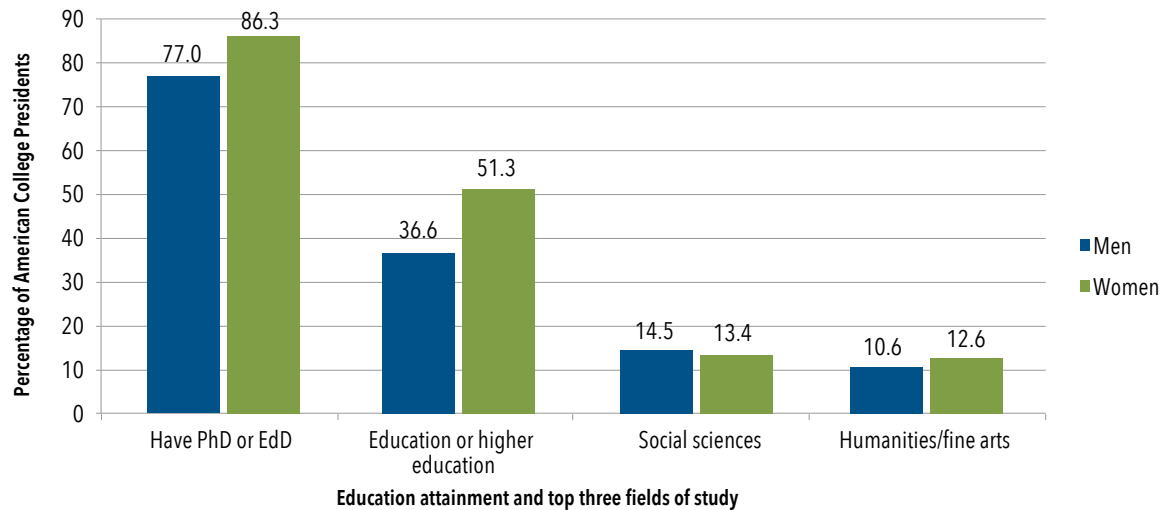
Source: Gagliardi, Jonathan S., Lorelle L. Espinosa, Jonathan M. Turk, and Morgan Taylor. 2017. *American College President Study 2017*. Washington, DC: American Council on Education.

FIGURE 5: FAMILY CHARACTERISTICS OF PRESIDENTS, BY GENDER IDENTITY



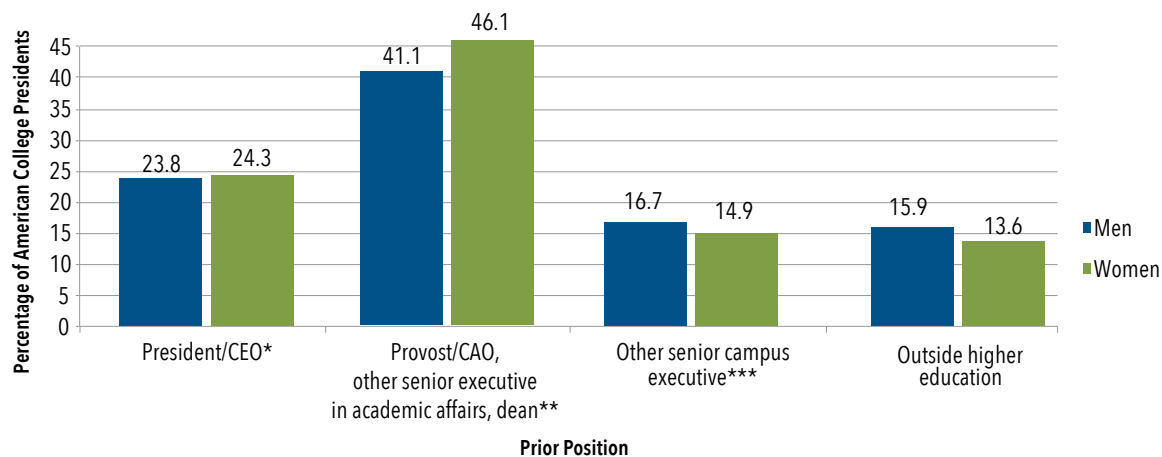
Source: Gagliardi, Jonathan S., Lorelle L. Espinosa, Jonathan M. Turk, and Morgan Taylor. 2017. *American College President Study 2017*. Washington, DC: American Council on Education.

FIGURE 6: PRESIDENTS' EDUCATIONAL ATTAINMENT AND TOP FIELDS OF STUDY, BY GENDER IDENTITY



Source: Gagliardi, Jonathan S., Lorelle L. Espinosa, Jonathan M. Turk, and Morgan Taylor. 2017. *American College President Study 2017*. Washington, DC: American Council on Education.

FIGURE 7. PRESIDENTS' IMMEDIATE PRIOR POSITION, BY GENDER IDENTITY



* Includes interim president/CEO/chancellor, president/CEO/chancellor of a system, and interim president/CEO/chancellor of a system

** Excludes department chairs and faculty.

*** Reflects sum of all senior executive positions outside academic affairs.

Source: Gagliardi, Jonathan S., Lorelle L. Espinosa, Jonathan M. Turk, and Morgan Taylor. 2017. *American College President Study 2017*. Washington, DC: American Council on Education.

TABLE 4: PERCENTAGE OF CAO POSITIONS HELD BY WOMEN, BY INSTITUTION TYPE

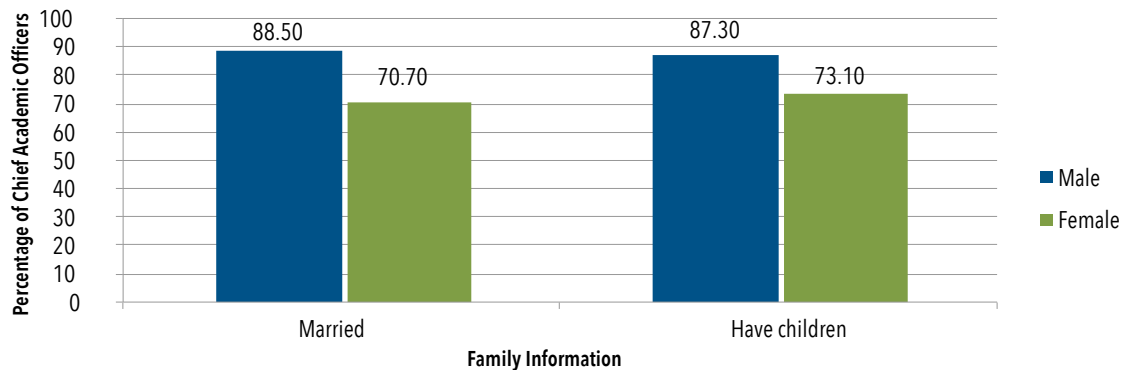
Institution Type	2008	2013
All Institutions*		
Doctorate-granting	33.3	26.1
Master's	37.2	43.6
Bachelor's	36.6	38.2
Associate	49.8	54.7
Special Focus	30.2	35.8
Total**	40.2	43.6
Public		
Doctorate-granting	40.0	25.3
Master's	33.6	42.0
Bachelor's	27.8	40.8
Associate	49.9	54.1
Special Focus	39.1	63.6
Total**	44.02	47.69
Private		
Doctorate-granting	25.9	27.9
Master's	40.2	44.8
Bachelor's	38.2	36.9
Associate	60.0	48.4
Special Focus	26.6	30.2
Total**	34.95	37.66

* Includes public, private not-for-profit, and private for-profit institutions

** Total includes institutions classified as "Other," which includes institutions not included in Carnegie Classification, such as some state higher education systems.

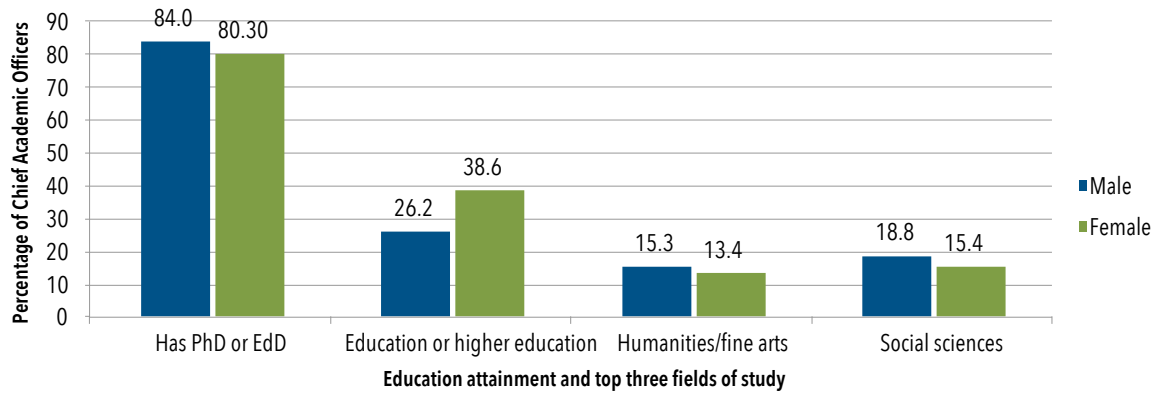
Source: American Council on Education, unpublished 2008 and 2013 Chief Academic Officers Survey data

FIGURE 8: FAMILY CHARACTERISTICS OF CHIEF ACADEMIC OFFICERS, BY SEX



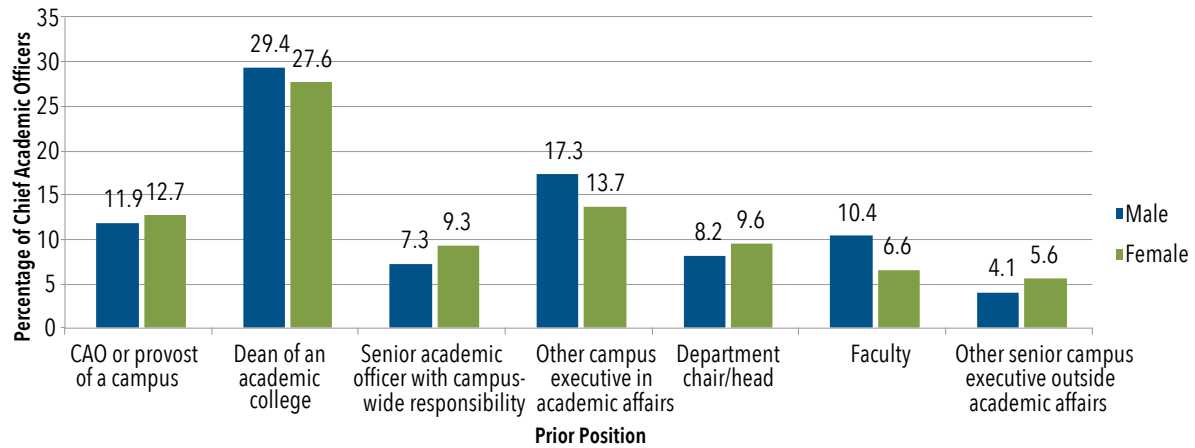
Source: American Council on Education, unpublished 2013 Chief Academic Officers Survey data

FIGURE 9: CHIEF ACADEMIC OFFICERS' EDUCATION ATTAINMENT AND TOP FIELDS OF STUDY, BY SEX



Source: American Council on Education, unpublished 2013 Chief Academic Officers Survey data

FIGURE 10: CAREER HISTORY: POSITION PRIOR TO BEING CAO, BY SEX



Source: American Council on Education, unpublished 2013 Chief Academic Officers Survey data

TABLE 5: OVERALL BOARD SEX COMPOSITION

Institutional Type	2015	2010
Independent		
Female	31.7	30.2
Male	68.2	69.8
Public		
Female	31.5	28.4
Male	68.5	71.6

Source: Association of Governing Boards of Universities and Colleges. 2010. *2010 Policies, Practices, and Composition of Governing Boards of Independent Colleges and Universities*.

TABLE 6: BOARD CHAIRS

Institutional Type	2015	2010
Private		
Female	22.6	19.0
Male	77.4	81.0
Public		
Female	24.1	17.4
Male	75.9	82.6

Source: Association of Governing Boards of Universities and Colleges. 2010. *2010 Policies, Practices, and Composition of Governing Boards of Independent Colleges and Universities*.

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