This chapter presents a descriptive analysis of the growth of managerial and professional staff from Fall 1993 to Fall 2011 across institution types and sectors, and a detailed snapshot of the demographic composition of these staff in Fall 2016. Our results indicate tremendous growth in the population of non-faculty staff over time, and reveal key patterns in staff employment by gender and race/ethnicity.

Mapping the Growth and Demographics of Managerial and Professional Staff in Higher Education

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The number of managerial and professional staff in higher education has grown steadily over the past several decades (Desrochers & Kirshstein, 2014). This growth has coincided with a dramatic shift in the composition of faculty toward a predominately contingent workforce (Finkelstein, Conley, & Schuster, 2016; McNaughtan, García, & Nehls, 2018). As a result, professional staff hiring has far outpaced the hiring of tenure-track faculty since 2000 (Bennett, 2009; Desrochers & Wellman, 2011), and in some institutions, managerial and professional staff outnumber full-time faculty (Desrochers & Kirshstein, 2014). These employment shifts have gained attention among higher education scholars and other stakeholders who have expressed concern about the potential consequences of administrative growth, such as diminished faculty influence and increased costs and inefficiencies (Bennett, 2009; Ginsberg, 2011). Despite these criticisms, scholars have also recognized the important roles that professional staff play as the mission and scope of higher education institutions have expanded and become increasingly complex (Rhoades & Torres-Olave, 2015). In addition, much of the increase in managerial and professional staff hiring in recent decades has corresponded with increases in student enrollment, suggesting that an important driver of staff hiring is student demand (Desrochers & Wellman, 2011; Desrochers & Kirshstein, 2014).

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The purpose of this introductory chapter is to provide a descriptive analysis of the growth of managerial and professional staff in higher education. These staff play a crucial role in supporting the higher education enterprise, as is demonstrated in subsequent chapters of this volume. However, relatively little is known about the distribution of staff across and within higher education sectors, or about the demographic diversity of this population. This chapter addresses this gap in our knowledge by mapping the demographic characteristics of managerial and professional staff, focusing specifically on trends in the gender and racial/ethnic composition of staff within and across institution types and sectors.

Background

Recognized as the fastest growing category of employees on campus, managerial and professional staff, sometimes referred to as "managerial professionals" in the literature, have been conceptualized by scholars as neither faculty nor senior administrators (Rhoades, 1998; Rhoades & Sporn, 2002). Although managerial and professional staff have traditionally occupied the periphery of higher education, they have become increasingly central to the core activities of higher education institutions. Managerial and professional staff are more frequently recognized as being engaged in the "production work" of higher education, a domain historically associated with faculty (Rhoades, 1998). Many managerial and professional staff work directly in the areas of teaching, learning, and research, while others occupy roles that provide institutional and student support. These professionals are engaged in key areas such instructional support and technology, budgeting and planning, faculty and staff development, fundraising, research management, outreach and public service, and student services.

To provide a foundation for examining the growth of managerial and professional staff in higher education, we highlight three general bodies of literature. First, we analyze the

scholarship documenting the growth of higher education administration. Second, we review possible explanations for the growing population of professional staff. Finally, we discuss the limited body of knowledge on the demographics and characteristics of managerial and professional staff.

Managerial and Professional Staff: A Growing Workforce

Administrative growth in higher education has manifested in two ways: 1) increases in the costs required to hire and retain professional staff; and 2) increases in the number of people employed by the institution in professional staff positions. Administrative growth in higher education is not a recent phenomenon; a number of studies have examined administrative growth in terms of expenditures dating back to the 1970s (Hansen & Guidugli, 1990; Leslie & Rhoades, 1995). In the 1990s concerns were realized when the ratio of administrators to students surpassed numbers of faculty to students (Leslie & Rhoades, 1995).

Research on managerial and professional staff is typically understood in terms of their relationship to costs and expenditures. However, the growth of non-faculty positions between the late 1980s and into the 2000s has also been documented (Bennett, 2009; Desrochers & Wellman, 2011), including comparisons of administrative to faculty growth during the same period (Archibald & Feldman, 2010; Leslie & Rhoades, 1995). Studies analyzing this approximate period (including the present study) have overwhelmingly confirmed large growth in the area of non-faculty professionals in the academy. For example, one study found that support staff doubled in 20 years between 1987 and 2007 and at the same time, the ratio of managers and staff compared to students grew by 34%, compared with 10% rise in the ratio of instructors to students (Bennett, 2009). Another study found that, on average, the number of executive/managerial and non-faculty professionals

grew faster than the number of full-time faculty at nearly all types of postsecondary institutions between 1990 and 2012 (Desrochers & Kirshtein, 2014).

Possible Explanations for the Increases in Managerial and Professional Staff

With regard to growth in managerial and professional staff, scholars and institutional leaders have come to consensus around three explanations: 1) environmental demands; 2) changing organizational structures in higher education; and 3) evolution and disaggregation of the faculty role. As environmental demands have increased, colleges have hired professional and managerial staff to keep pace. Environmental demands include increases in federal and state regulations, corresponding reporting requirements, and overall greater accountability measures from a variety of external sources (Rhoades, 2007; Kirk, 2014). Additionally, student demographic shifts as a result of improved access to higher education require greater recruitment and support services efforts. At the same time, institutional isomorphism, the concept of organizations becoming more like one another over time, has influenced managerial and professional growth in higher education through government and peer influence (DiMaggio & Powell, 1983). Finally, the integration of technological advancements into all aspects of campus organization have resulted in massive growth in IT professionals who administer IT systems and provide support for instructional technologies (Rhoades, 2007).

Second, the structure of higher education has changed due to the gradual shift from general consideration as a public good to a private good, which has resulted in more complex and bureaucratic structures (Hansen & Guidugli, 1990). Levels of bureaucracy require greater processes and administration, leading to more people working to make things happen. The corporatization of higher education and the advent of academic capitalism (Slaughter & Rhoades, 2005) have also contributed to a diversification of institutional commitments and an

increase in research efforts and competition for corresponding resources at research institutions. For example, academic capitalism, wherein colleges and universities adopt market-like behaviors (Slaughter & Rhoades, 2005), explains why institutions seek increased research funds to engage in research and entrepreneurial activities. Similarly, higher education is increasingly seen as an economic benefit, and colleges and universities feed into this narrative as they engage in profit-driven activities much like corporations (Gumport, 2000). This has added a broad range of institutional activities in the process. For example, one report found that many of the institutions with the greatest managerial and professional staff growth were universities with major hospitals (Bennett, 2009).

Finally, fundamental changes in the faculty profession have occurred in recent decades, resulting in differentiation and specialization of the faculty role. As part of the evolution toward a more business-like structure of management, responsibilities traditionally assigned to faculty members, such as academic advising, have given way to focus on research and instruction (Gumport, 1997; Rhoades & Torres-Olave, 2015). Increasingly, non-faculty professionals have taken over this boundary space within higher education, creating new professional roles in areas such as student services and instructional technology (Leslie & Rhoades, 1995; Rhoades & Torres-Olave, 2015).

Managerial and Professional Staff: Who are They?

Despite their growing visibility in higher education, the body of literature on the distribution and demographics of managerial and professional staff remains underdeveloped. Researchers have yet to provide a comprehensive analysis of the demographics of this population, but some professional associations have examined the demographics of staff working in particular functional areas. Here we highlight several studies that have shed some light on the demographics of managerial and professional staff.

As identified above, information technology (IT) professionals comprise a significant portion of professional staff in higher education. A recent report on the profession from the nonprofit association EDUCAUSE (an organization that helps higher education elevate the impact of IT) provided a snapshot of the demographics of this group, demonstrating that the higher education IT workforce is predominantly White and more male than the general population (EDUCAUSE, 2019). Women IT staff (45%) were nearly equal to men (55%), while management trends by gender reflect those in other hierarchical academic and non-academic positions on campus. Women made up 38% of IT managers compared to 62% for men, and women CIOs were largely outnumbered by men at 23% compared to 77% (EDUCAUSE, 2019).

A 2018 research brief published by the College and University Professional Association for Human Resources (CUPA-HR) provides insights into the demographicEds and representation of different groups in higher education jobs. The report showed that, overall, people of color are under-represented in higher education positions. White men are over-represented in the more prestigious roles of faculty and administrators, while White women are concentrated in staff and professional positions (McChesney, 2018). Additionally, both men and women of color have greater representation in staff and professional positions than faculty and administration (McChesney, 2018). In the field of student affairs, 71% of positions are held by women but racial representation by student affairs professionals still lags behind student racial representation on campus.

Study Purpose

Managerial and professional staff have grown in number and importance in recent decades, warranting a deeper examination of staffing patterns in higher education. Recent literature has documented the changing composition of the faculty workforce (e.g.,

McNaughtan et al., 2018), but researchers have yet to undertake a similar study of non-faculty professional staff. In this study, we provide a comprehensive descriptive analysis of the distribution and demographic composition of professional staff in higher education across the United States. Specifically, we address the following research questions:

1. To what extent has the managerial and professional workforce grown over time across higher education institutions in the U.S.?
2. How does the demographic composition of managerial and professional staff vary within institution types and sectors?
3. How does the demographic composition of managerial and professional staff vary across institution types and sectors?

Data and Methods

The data for this analysis was drawn from the Integrated Postsecondary Data System (IPEDS). IPEDS surveys are administered annually by the National Center for Education Statistics (NCES) and provide the most comprehensive source of institution-level data related to institutional characteristics and staffing at public and private postsecondary institutions in the U.S. This study drew on data obtained from two IPEDS survey subcomponents: Human Resources and Institutional Characteristics. Significant changes made by NCES to the Human Resources survey beginning in Fall 2012 present challenges to researchers interested in longitudinal analyses. Changes made to the categorization of non-instructional staff render these variables in the pre- and post-Fall 2012 data unsuitable for comparison. To mitigate these challenges, we examined data at three time points: Fall 1993, Fall 2011, and Fall 2016 (the most recent complete data file available). Our across-time analysis (the focus of our first research question) examines the growth of professional staff between Fall 1993 and Fall

2011. The Fall 2016 data provide a single-year snapshot that allows us to examine our second and third research questions related to the demographic composition of professional staff. After downloading the data directly from the IPEDS Data Center (separately by each year for each subcomponent), we constructed a multiyear dataset following the IPEDS data processing procedures recommended by Jaquette and Parra (2014).

Our study sample includes all accredited institutions that completed the IPEDS Human Resources Fall Staff survey at each time point (completion of IPEDS surveys is mandatory for all U.S. higher education institutions participating in the Title IV federal financial aid program). This included 3,072 institutions in Fall 1993; 3,649 institutions in Fall 2011; and 3,841 institutions in Fall 2016 (see Table 1.1 for an overview of changes in the number of institutions by sector and type).

Variables

The primary variable of interest in our study is managerial and professional (non-faculty) staff. As noted above, the staff categories measured in the IPEDS Human Resources survey changed over time, from 8 broad categories pre-Fall 2012 to 17 more granular categories in Fall 2012 and beyond. Thus, we use two sets of variables to operationalize professional staff. In the Fall 1993 and Fall 2011 data, we aggregated staff identified in two categories to capture those engaged in managerial and professional roles. The first category is "executive, administrative, and managerial", defined by IPEDS as "persons whose assignments require management of the institution" with titles such as general and operations managers (including assistant and associate managers). The second category is "other professional (support/service)", defined as "persons employed for the primary purpose of performing academic support, student service, and institutional support, whose assignments would require a baccalaureate degree or higher." This category includes mid-level

professionals in areas such as human resources, budget and finance, informational technology, libraries, student/academic services, and health care.

In the Fall 2016 data, we created a comparable professional staff variable by aggregating the categories that mapped most closely to the two staff categories described above (using the detailed definitions provided in the IPEDS Glossary as our guide). We aggregated staff identified in the following occupational categories: management; public service; librarians/library technicians; archivists/curators and museum technicians; student and academic affairs and other education services; business and financial operations; computer, engineering and science; community service, legal, arts, and media; and healthcare practitioners.

For both sets of variables we combined part- and full-time professional staff to provide the most comprehensive description of non-faculty professionals in higher education. In the Fall 2016 data we disaggregated total professional staff by gender, race/ethnicity, and citizenship using the reporting categories provided by IPEDS. Non-U.S. citizens (described in IPEDS as Nonresident aliens) are designated in a separate category and not included in the other race/ethnicity categories.

The second variable of interest in our study is institutional classification (type and sector). To define institutions by type and sector we used the Carnegie Basic Classification, a system that is publically available and widely used by researchers and administrators to classify degree-granting institutions in the U.S. The Carnegie Classifications are updated periodically, and the classification categories have become more granular over time (see McCormick and Zhao (2005) for an overview of key issues related to institutional classification). In each year of our data (Fall 1993, Fall 2011, and Fall 2016), we categorized institutions based on the classification structure in place at each time point. To allow for

comparison over time, we collapsed the classifications into twelve consistent institutional categories divided by type (associates, baccalaureate, masters and doctoral) and sector (public, private non-profit, and private for-profit), in addition to a final category identifying special focus institutions (including tribal colleges).

Analytic Strategy

The main goal of our study is to describe and compare the composition and distribution of professional staff at several points in time. To that end, we analyzed our data using descriptive statistics (e.g., frequencies and crosstabs). The results of these descriptive analyses help inform our understanding of professional staff demographics and staffing patterns within and across various types of institutions.

Results of Descriptive Analyses

We present the results of our analyses in three sections corresponding to our research questions. To answer our first question we examined the distribution of non-faculty professional staff by institution type, sector, and time. Table 1.1 displays the number and proportion of institutions and professional staff by institution type and sector at two time points: Fall 1993 and Fall 2011. This table also includes two columns summarizing the change in the proportion and number of professional staff between time points.

Across the 18-year period, we found that the number of professional staff at degree-granting institutions nearly doubled, increasing from 557,737 to 1,034,717. The number of professional staff increased across all institution types and sectors (with the exception of private non-profit associates colleges, which saw a very small decline). However, nearly half of the total growth in professional staff occurred at doctoral institutions (223,425, or 47%). With regard to sector, public institutions accounted for half of the total increase in

professional staff (240,020, or 50%), followed by private non-profit institutions (144,911, or 30%).

The distribution of professional staff by institution type and sector remained largely similar from 1993 to 2011. Doctoral institutions employed approximately half of all professional staff at both points in time. By sector, the majority of professional staff were employed at public institutions across time. Private non-profit masters and private for-profit associates institutions gained slightly in the proportion of total professional staff employed by these institutions from 1993 to 2011, while public masters and doctoral institutions and special purpose institutions experienced very slight declines in their proportions.

We addressed our second research question by examining the gender and race/ethnicity of professional staff *within each institutional type and sector* in Fall 2016. Table 1.2 displays the distribution of staff by demographic group (gender, race, and citizenship). We first note that the total number of non-faculty professional staff in higher education was approximately 1.24 million in Fall 2016, and nearly 60% of professional staff were employed at public institutions (due to the aforementioned changes in the IPEDS categorization of staff discussed in the Data and Methods section, these numbers may not be directly comparable to the professional staff totals and proportions displayed in Table 1.1).

Within each institution type and sector women comprised a higher proportion of professional staff than men, particularly within private for-profit and special focus institutions where approximately two-thirds of all professional staff were women. Within most institution types and sectors, two-thirds or more of all professional staff were White. However, within private for-profit associates colleges, the racial-ethnic distribution was more diverse: half of professional staff were White (51%), followed by Hispanic (25%), Black (14%), Asian (3%), and two or more races (3%). Special focus institutions also employed a

more diverse population, with people of color representing about 36% of all professional staff. More generally, a higher proportion of the staff within public institutions and private for-profit institutions were people of color compared to the distribution within private non-profit institutions, which had higher proportions of White staff. Within doctoral institutions, there was a higher proportion of staff identified as Nonresident aliens relative to the other institution types.

Our third research question focused on the distribution of staff within gender and race/ethnicity groups *across institution types and sectors*. Table 1.3 displays the number of staff by gender, race/ethnicity, and citizenship and within each group, the proportion of staff employed by institution type and sector. Within gender, the distribution of men and women by institutional type and sector was nearly identical. The majority of men (60%) and women (58%) were employed at public institutions, 29% of both groups were employed at private non-profit institutions, and the remaining 10% of men and 12% of women were employed at private for-profit or special purpose institutions.

Within race/ethnicity, more than half of Asian (62%) and White (54%) staff were employed at public or private non-profit doctoral institutions. Lower proportions of both Asian (8%) and White (13%) staff were found at public associates level colleges relative to historically underrepresented race/ethnicity groups: American Indian (16%), Black (18%), Hispanic (18%), and Pacific Islander (31%). Higher proportions of staff of color were also found at special purpose institutions (including tribal colleges, where 26% of all American Indian staff were employed). Across all race/ethnicity groups, the proportion employed at private for-profit institutions was very small; however, the proportions were higher for Black, Hispanic, Pacific Islander, and multi-racial staff. Staff identified as Nonresident aliens were primarily employed at public and private non-profit doctoral institutions.

To further examine staffing patterns within race/ethnicity, we explored the intersection between gender and race/ethnicity groups. We collapsed the twelve-category institution type/sector variable into four institution types (associates, baccalaureate, masters/doctoral, and special-focus) to simplify the analysis. Table 1.4 displays the distribution of professional staff by gender within race/ethnicity groups *across institution types (sectors combined)*. Women outnumbered men in every race/ethnicity group, but the majority of Nonresident alien staff were men. Similar to the findings reported in Table 1.3, there were few differences in the distribution of men and women across the four institution types within each race/ethnicity group. Within race/ethnicity (genders combined), similar patterns also emerged in the distribution of staff by the four institution types. Relative to Asian, White, and Nonresident alien staff, lower proportions of underrepresented racial/ethnic minority staff (American Indian, Black, Hispanic, and Pacific Islander) were employed at masters/doctoral institutions and higher proportions were employed at associates colleges.

Discussion of Study Findings

This study provides a descriptive analysis of the growth of managerial and professional staff from Fall 1993 to Fall 2011 across institution types and sectors. We also present a detailed snapshot of the demographic composition of managerial and professional staff within and across institution types and sectors in Fall 2016. In this section, we discuss key findings of our study and their implications for higher education research and administration.

The Population of Managerial and Professional Staff Has Experienced Tremendous Growth Over Time

Our findings highlight a dramatic increase in the number of managerial and professional staff in higher education over the last twenty-five years. These findings build on previous research that found increases of a similar magnitude in the decade prior to our analytic period (Rhoades, 1998), suggesting that managerial and professional staff growth has been occurring steadily since the mid-1970s. By Fall 2016, the number of managerial and professional staff in higher education surpassed 1.2 million. By contrast, there were 815,760 full-time faculty and 732,972 part-time faculty employed in Fall 2016 (National Center for Education Statistics [NCES], 2017). Our results also indicate that managerial and professional staff growth is widespread; it has occurred fairly evenly across institution types and sectors, with the distribution of staff by type and sector looking very similar at the beginning and end of our analytic period. Doctoral institutions continue to employ more than half of all managerial and professional staff, likely due to their multifaceted research activities, affiliated medical systems, and large student enrollments, all of which may require greater numbers of professional staff.

The tremendous growth documented in this study also provides empirical support for the argument that managerial and professional staff have become more central to the mission of higher education across all types and sectors. Though increases in non-faculty personnel have been characterized negatively as drivers of administrative costs or "bloat" (e.g., Zywicki & Koopman, 2017), others have argued that such a view, which juxtaposes professional staff against faculty, ignores the value and "productivity" that these staff contribute to the institution (Rhoades, 1998). As demonstrated in subsequent chapters of this volume, colleges and universities are reliant on these staff to achieve their institutional missions and goals and

the growth observed in our findings provides additional evidence of the increasing investment in managerial and professional staff.

Women are Disproportionately Represented in Managerial and Professional Staff Roles Across All Institution Types and Sectors

Women comprise the majority of managerial and professional staff in higher education. This pattern holds true across all institution types and sectors, and within each of the race-ethnicity categories examined in our study (with the exception of Nonresident alien staff). These findings are in contrast to the demographic composition of full-time faculty in which men comprise the majority, particularly at the senior ranks (NCES Digest, 2017; Smith, Tovar, & García, 2012). However, the gender distribution of managerial and professional staff is similar to that of contingent faculty: women represent the majority of non-tenure track faculty and outnumber men in the ranks of lecturer and instructor (McNaughtan et al., 2018; NCES Digest, 2017).

Our study thus provides additional evidence of a disturbing pattern in higher education in which progressively fewer women are found at each rung of the academic ladder (American Council on Education [ACE], 2016). Women continue to be overrepresented in staff and contingent faculty roles, and underrepresented in tenured faculty ranks and high-level leadership positions such as president, chief academic officer, and dean (ACE, 2016; Kline, 2019). Moreover, though women comprise the majority of total managerial and professional staff, important gender differences may exist within this category when disaggregated by department or functional area. For example, women appear to be underrepresented in the field of information technology, particularly in managerial positions (EDUCAUSE, 2019).

Beyond the baseline data provided by our study, additional research is needed to further our understanding of gender representation and equity among managerial and professional staff. As suggested by Rhoades (2007), the majority presence of women in the managerial professions "raises further questions about social relations between the managerial professions and the academic profession, and between these and the often largely male-dominated occupations they liaison with outside the academy" (p. 133). Additional questions about the relationships between gender and various qualities of the managerial profession such as prestige, stratification, values, ideologies and paths to advancement must also be explored.

The Racial/Ethnic Composition of Managerial and Professional Staff Varies by Institution Type and Sector

Our study revealed important patterns in the distribution of professional staff by race/ethnicity. We found that professional staff from historically underrepresented racial/ethnic groups (e.g., American Indian, Black, Hispanic, and Pacific Islander) are employed in higher proportions at two-year colleges, special purpose institutions, and private for-profit institutions. By contrast, Asian, White, and Nonresident alien staff are employed in higher proportions at doctoral universities and private non-profit institutions. These findings are consistent with past studies examining the demographic distribution of both tenure-track and contingent faculty (McNaughtan, et al., 2018, Finkelstein et al., 2016; Smith et al., 2012). In addition to enrolling a more diverse student body (NCES, 2017), it is evident that two-year colleges and private for-profit institutions also employ a more diverse population of faculty and professional staff.

As suggested by these findings, racial/ethnic minorities continue to face persistent institutional barriers to their representation among faculty and staff at institutions that are

commonly perceived as elite, such as research universities and private non-profit institutions. Moreover, data from the American College President Survey reveal that racial/ethnic minority presidents are more likely to lead two-year institutions, and less likely to lead private non-profit institutions (ACE, 2017). These patterns are problematic and underscore the need for a deeper examination of the career pathways and advancement of managerial and professional staff of color.

Limitations of Aggregated Staff Categories

Finally, our study provides a broad overview of the overall population of managerial and professional staff in higher education, but does not examine variation within this population (e.g., by role, department, or functional area). As a result, our study cannot shed light on the specific areas in which growth has occurred over the last several decades. This limitation is largely due to constraints in the longitudinal data available to researchers. However, the recent changes made to the categorization of staff in the annual IPEDS Human Resources survey should allow future researchers to disaggregate the population of professional staff into several more granular occupational categories (e.g., student and academic affairs) to examine differences between professional groups, or within groups by gender and race/ethnicity.

Conclusion

The study presented in this chapter contributes to a greater understanding of the distribution and growth of managerial and professional staff over the last twenty-five years, as well as the demographic composition of this population. Our results provide evidence of tremendous growth in the number of managerial and professional staff over the last several decades. This growth has occurred across all institution types and sectors, signaling the critical role that managerial and professional staff play in fulfilling the increasingly complex

missions of these institutions. While this study provides important baseline data, it is clear that additional research is needed for a more complete understanding of the representation, pathways, and advancement of managerial and professional staff in higher education.

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Table 1.1. Distribution of Institutions and Professional Staff by Institution Type and Sector, Fall 1993 and Fall 2011

	Distribution of Institutions				Distribution of Professional Staff					
	1993		2011		1993		2011			
	n	%	n	%	n	%	n	%	change (% points)	change (n)
Public										
Associates	816	26.6	916	25.1	55,953	10.0	104,459	10.1	0.06	48,506
Baccalaureate	74	2.4	102	2.8	6,896	1.2	16,927	1.6	0.40	10,031
Masters	268	8.7	265	7.3	53,794	9.6	87,857	8.5	-1.15	34,063
Doctoral	149	4.9	174	4.8	205,679	36.9	353,099	34.1	-2.75	147,420
Private nonprofit										
Associates	127	4.1	79	2.2	3,594	0.6	3,167	0.3	-0.34	-427
Baccalaureate	533	17.4	492	13.5	35,999	6.5	60,819	5.9	-0.58	24,820
Masters	248	8.1	355	9.7	29,760	5.3	74,273	7.2	1.84	44,513
Doctoral	84	2.7	106	2.9	98,739	17.7	174,744	16.9	-0.82	76,005
Private for-profit										
Associates	152	4.9	417	11.4	3,549	0.6	19,101	1.8	1.21	15,552
Baccalaureate	7	0.2	97	2.7	228	0.0	6,079	0.6	0.55	5,851
Masters/Doctoral	-	-	48	1.3	-	-	36,687	3.5	-	-
Special Purpose (incl. Tribal Colleges and other special focus institutions)	614	20.0	598	16.4	63,546	11.4	97,505	9.4	-1.97	33,959
TOTAL	3,072	100.0	3,649	100.0	557,737	100.0	1,034,717	100.0	-	476,980

Table 1.2. Distribution of Professional Staff by Race/Ethnicity, Gender, and Citizenship (within Institution Type and Sector), Fall 2016

		All Races (%)		Race/Ethnicity (%)								Citizenship (%)
	N	Female	Male	American Indian	Asian	Black	Hispanic	White	Pacific Islander	Two or More Races	Race Unknown	Non-Resident Alien
Public												
Associates	163,313	61	39	1	4	13	11	66	1	1	3	1
Baccalaureate	21,262	55	45	1	3	11	18	64	0	1	2	0

Masters	95,481	57	43	1	4	13	7	71	0	1	2	1
Doctoral	451,430	59	41	0	7	8	7	71	0	1	3	2
Private nonprofit												
Associates	1,188	55	45	0	2	13	6	75	0	1	3	0
Baccalaureate	60,367	55	45	0	2	10	4	80	0	1	3	0
Masters	86,477	57	43	0	3	7	6	78	0	1	3	1
Doctoral	216,883	59	41	0	9	9	7	67	0	1	3	3
Private for-profit												
Associates	4,691	66	34	0	3	14	25	51	0	3	2	0
Baccalaureate	4,096	66	34	0	3	16	7	67	0	2	4	0
Masters/Doctoral	16,729	61	39	0	4	12	9	66	0	3	6	0
Special Purpose (incl. Tribal Colleges and other special focus institutions)	121,667	64	36	1	12	12	10	58	0	1	3	2
TOTAL	1,243,584	59	41	1	6	10	8	69	0	1	3	2

Table 1.3. Distribution of Professional Staff by Institution Type and Sector (within Race/Ethnicity, Gender, and Citizenship), Fall 2016

	All Races (%)		Race/Ethnicity (%)								Citizenship (%)
	Female	Male	American Indian	Asian	Black	Hispanic	White	Pacific Islander	Two or More Races	Race Unknown	Non-Resident Alien
N	735,554	508,030	6,720	79,760	123,780	95,940	858,259	3,290	15,791	38,130	21,914
Public											
Associates	13	13	16	8	18	18	13	31	11	11	4
Baccalaureate	2	2	2	1	2	4	2	3	1	1	0
Masters	7	8	9	5	10	7	8	10	7	6	3
Doctoral	36	37	31	38	30	31	37	21	37	39	51
Private nonprofit											
Associates	0	0	0	0	0	0	0	0	0	0	0
Baccalaureate	5	5	3	2	5	2	6	5	4	4	1
Masters	7	7	4	3	5	6	8	9	7	7	2
Doctoral	17	17	8	24	16	16	17	9	17	19	28
Private for-profit											
Associates	0	0	0	0	1	1	0	0	1	0	0

Baccalaureate	0	0	0	0	1	0	0	0	1	0	0
Masters/ Doctoral	1	1	1	1	2	2	1	2	3	3	0
Special purpose (incl. Tribal Colleges and other special focus institutions)	11	9	26	19	11	13	8	9	11	9	11

Table 1.4. Distribution of Professional Staff by Institution Type (within Race/Ethnicity, Gender, and Citizenship), Fall 2016

	N	Assoc. (%)	Bacc. (%)	MA/PhD (%)	Spec. (%)
All races					
Female	735,554	14	6	69	11
Male	508,030	13	7	71	9
Total	1,243,584	14	7	70	10
American Indian					
Female	4,130	16	4	52	28
Male	2,590	17	6	54	23
Total	6,720	16	5	52	26
Asian					
Female	48,157	8	2	70	20
Male	31,603	9	3	71	18
Total	79,760	8	2	71	19
Black					
Female	81,413	18	6	63	13
Male	42,367	18	9	64	9
Total	123,780	18	7	63	11
Hispanic					
Female	59,388	19	6	61	14
Male	36,552	20	7	61	11
Total	95,940	20	6	61	13
White					
Female	499,667	13	7	71	9
Male	358,592	12	8	72	7
Total	858,259	13	8	71	8
Pacific Islander					
Female	1,798	31	7	53	9
Male	1,492	32	8	51	9
Total	3,290	31	8	52	9
Two or More Races					
Female	9,765	12	5	71	11
Male	6,026	12	6	72	10
Total	15,791	12	6	72	11
Race Unknown					
Female	21,342	12	6	73	10
Male	16,788	12	6	74	8
Total	38,130	12	6	73	9
Non-Resident Alien					
Female	9,894	5	2	82	11
Male	12,020	4	1	85	10

Total	21,914	4	2	83	11