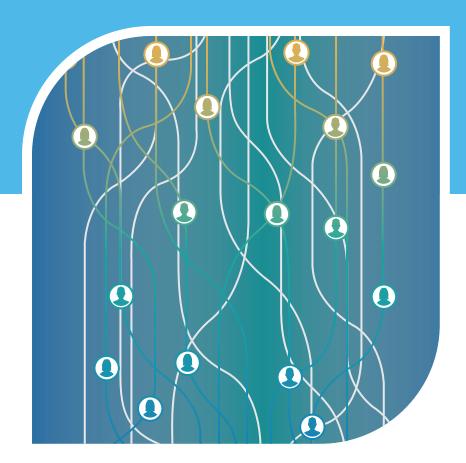
The Shifting Academic Workforce: Where Are the Contingent Faculty?

Steven Hurlburt, Delta Cost Project, American Institutes for Research Michael McGarrah, American Institutes for Research









About this Research

Contingent faculty—that is, full- and part-time instructors not on the tenure track—now comprise the majority of all faculty at U.S. colleges and universities. This shift in the academic workforce is well documented; what is less understood is the concentration of contingent faculty at different institutional types, the nature of their contracts, and how student outcomes are affected by the shift.

This paper, first in a two-part series, profiles the contingent workforce across institutional types. The TIAA Institute sponsored this research, conducted by Steven Hurlburt and Michael McGarrah of the Delta Cost Project at American Institutes for Research*, to help higher education leaders gain a more comprehensive picture of today's academic workforce based on an in-depth analysis of the data. Among their many findings is the fact that institutions with higher concentrations of contingent faculty, and part-time contingent faculty in particular, are the same institutions where students most at risk of noncompletion, such as part-time and low-income students, are most likely to enroll.

About the TIAA Institute

The TIAA Institute helps advance the ways individuals and institutions plan for financial security and organizational effectiveness. The Institute conducts in-depth research, provides access to a network of thought leaders, and enables those it serves to anticipate trends, plan future strategies and maximize opportunities for success. To learn more, visit www.tiaainstitute.org.

About the Delta Cost Project at AIR

The Delta Cost Project at American Institutes for Research (AIR) provides data and tools to help higher education administrators and policymakers improve college affordability by controlling institutional costs and increasing productivity. The work is animated by the belief that college costs can be contained without sacrificing access or educational quality through better use of data to inform strategic decision making. For more information about the Delta Cost Project, visit www.deltacostproject.org and for more information about American Institutes for Research, visit www.air.org.

^{*}Since this paper was written, Michael McGarrah has moved from the American Institutes for Research to the Aspen Institute.

Introduction

A steady and fundamental change is underway in the makeup of the academic workforce in U.S. higher education as non-tenure-track faculty—or contingent faculty—continue to occupy an increasingly larger share of faculty appointments. This decades-long trend is not expected to abate, engendering widespread concern about job security, working conditions, and diminished future prospects for contingent faculty, particularly among part-time contingent (adjunct) faculty, as well as the potential effects of this trend upon student learning.

Although increasing attention is being directed to the need for alternative workforce models in higher education (Kezar & Maxey, 2015), most research has focused on the faculty rather than the institutions that employ them. For example, abundant information is available on the demographic characteristics of contingent faculty (Snyder & Dillow, 2015; Yakoboski, 2015), but little is known about the characteristics of the types of institutions at which they are most often employed.

To this end, this brief, the first of a two-part series, presents a profile of the contingent workforce, examining the number and percentage of non-tenure-track faculty at colleges and universities based on a variety of institutional characteristics. By exploring the relationships between those characteristics and the concentration of contingent faculty, this brief seeks to provide a more comprehensive understanding of the landscape surrounding changes to the academic workforce, and to identify whether contingent faculty are more likely to be employed in certain types of institutions. The second brief will evaluate how the concentration of contingent faculty—and the changing concentration of these faculty—relate to various measures of institutional spending. In particular, the second brief will investigate whether the use of contingent faculty results in cost savings or merely invites cost shifting to other areas.

Contingent faculty continue to occupy an increasingly larger share of faculty appointments across all institution types.

Any opinions expressed herein are those of the authors, and do not necessarily represent the views of TIAA, the TIAA Institute or any other organization with which the authors are affiliated.

Key Findings

- Contingent faculty have increasingly joined the academic workforce across all types of institutions. Between 2003 and 2013, increases ranged from 2 percentage points for private research institutions to 17 percentage points for public bachelor's colleges and universities. By 2013, contingent faculty accounted for at least half of all instructional faculty across all types of institutions, ranging from 50% at public research universities to more than 80% at public community colleges.
- Part-time positions of one year or less make up the largest share of non-tenuretrack positions at all types of institutions, ranging from 19% of all faculty positions at public research institutions to 50% of all faculty positions at community colleges. The employment status of these non-tenure-track contingent faculty is tenuous, allowing institutions to hire and relieve most of their contingent instructional staff relatively quickly over a short period of time.
- Contingent faculty have substituted for tenure or tenure-track faculty in most types of institutions. While the addition of contingent faculty has outpaced the loss of tenure or tenure-track faculty at private bachelor's and master's institutions, the rise in the use of contingent faculty has merely offset declines in tenure-line faculty at all other types of four-year institutions. At public community colleges, the decrease in the number of tenure-line faculty surpassed the growth in the number of contingent faculty, resulting in a net loss of 3 full-time equivalent (FTE) faculty per 1,000 FTE students.
- Colleges and universities with higher shares of students at risk of noncompletion also have higher shares of contingent faculty, particularly among private fouryear institutions. Among private four-year colleges and universities, those with the largest shares of part-time students (65% or greater) reported higher concentrations of contingent faculty (89%), compared to 80% at private institutions with moderate shares (between 35% and 65%) and 61% at private institutions with the lowest shares (below 35%). Likewise, private four-year institutions with the largest shares of Pell Grant recipients also reported higher concentrations of contingent faculty (81% versus 77% and 59% for private institutions with moderate and lower shares, respectively).

Data

The data in this brief come from the Delta Cost Project Database, 1987–2013. This includes data reported by institutions to the U.S. Department of Education's Integrated Postsecondary Education Data System (IPEDS), which have been harmonized (when possible) to account for survey changes over time. Staffing data from the 2002 Fall Employees by Assigned Position (EAP) Survey (i.e., 2002-03 school year, or 2003 academic year) were appended to the Delta Cost Project Database to provide more detailed staffing information.

The brief focuses primarily on the 2012–13 academic year, with select analyses examining the 10-year period from 2003 to 2013. Findings are presented for public and private, nonprofit four-year institutions and public community colleges, organized by 2010 Carnegie Classification and by sector. Institutions may award many types of degrees and certificates, although the Carnegie Classification denotes the highest type of degree typically offered, as follows:

- Research institutions: Award at least 20 research doctoral degrees per year.
- Master's institutions: Award at least 50 master's degrees and fewer than 20 doctoral degrees per year.
- Bachelor's institutions: Bachelor's degrees represent at least 10% of undergraduate degrees; fewer than 50 master's or 20 doctoral degrees are awarded per year.
- Public community colleges: Award associate's degrees or certificates that require 2 years of study or less; bachelor's degrees account for less than 10% of degrees awarded per year.

Definitions

The term *faculty* is defined in this brief as staff whose primary responsibility is instruction or instruction combined with research and/or public service. Faculty may hold the rank of professor, associate professor, assistant professor, instructor, lecturer, or equivalent. The tenure status categories used in this report are based on the federal Integrated Postsecondary Education Data System (IPEDS) reporting categories and definitions. Because the purpose of this brief is to provide a basic profile of the types of institutions in which contingent faculty are employed, findings are presented as head-count faculty (unduplicated count of faculty employed at an institution) unless otherwise noted.

- **Tenure or tenure-track faculty:** Full-time and part-time staff whose primary responsibility is instruction or instruction combined with research and/or public service with tenure or in a position that leads to consideration for tenure.
- Contingent faculty: Full-time and part-time staff whose primary responsibility is instruction or instruction combined with research and/or public service and who are not in a tenure-track position or are at an institution without a tenure system.

Why Study Contingent Faculty?

Since its inception, tenure has been a central feature of American higher education. By promoting academic freedom, tenure is held to be fundamental to the generation of new knowledge. In turn, faculty are meant to bring their scholarly expertise to the classroom, enriching the educational experiences of the undergraduate and graduate students they teach. But, for several decades now, colleges and universities have increasingly relied upon a new kind of educator: the contingent instructor.

The motivations for this fundamental change in the instructional workforce at postsecondary institutions are many, ranging from the pedagogical to the financial. For instance, as the number and types of students at postsecondary institutions grow—especially the population of nontraditional students and those with a keen eye toward practical or technical training that will quickly place them in a higher-paying career—and with rising operational costs, the need for flexible, specialized instructors has arisen. Hiring instructors under a contingent arrangement for this purpose, among others, can be more efficient than hiring instructors under tenure or tenure-line conditions. Whereas tenured or tenure-line faculty can negotiate competitive salaries, often require a long-term investment from the institution, and possibly can commit to a relatively narrow area of research and teaching, contingent instructors are less expensive, require no long-term investment, and can be hired ad hoc to meet the

?

As contingent faculty have become the new majority, questions about their working conditions and their impact on students have arisen, along with questions about the efficiency of using them.

institution's ever-shifting needs. Whatever the reason, as contingent faculty have become the new majority, questions about their working conditions and their impact on students have arisen, along with questions about the efficiency of using them.

Working on the Margins

Many contingent instructors, particularly adjunct faculty, find themselves at the margins of the institutions they serve. Beginning with wages, the disparities between tenure-line faculty and contingents is abundantly clear: full-time, contingent instructors earn 26% less per hour, and part-time contingent workers earn 64% less per hour than their tenured or tenure-track counterparts. In addition, contingent faculty are more likely to receive fewer or no benefits (Monks, 2004). Established professors earn, on average, salaries between \$60,000 and \$100,000 per year, whereas full-time contingent faculty average \$47,500 per year and part-time (or adjunct) faculty—who often are paid per class and semester—earn an average of only \$2,700 per course. With a full course load of eight classes, this amounts to only \$21,000 per year, without benefits (Curtis & Thornton, 2013).

Perhaps even more concerning than the raw salary and benefits of contingent faculty is evidence that they are actively excluded from professional activities and resources within the institution, such as self-governance, professional development, curriculum development, administrative support, and even social functions. Moreover, there is little evidence to suggest that postsecondary institutions have made an effort to correct for this exclusion (Kezar & Sam, 2013). All of these working conditions are further compounded by the fact that contingent faculty often face irregular hiring practices, receive little or no formal evaluation, are given unclear or no salary and promotion schedules, and are assigned some of the most demanding and undesirable teaching loads (McKenna, 2015; Kezar & Sam, 2013).

As the share of contingent faculty in the postsecondary workforce continues to expand, the essential character of that workforce will continue to evolve. For instance, tenure-line faculty may increasingly specialize only in research, with full-time contingent instructors filling a mix of research and instructional needs, and part-time contingent faculty serving primarily as instructors in required or specialized courses and technical training. Indeed, for some time, such a model has been the official—and arguably successful—practice within divisions of universities, such as medical schools (Kezar & Maxey, 2015). Institution-wide, however, this model has unfolded largely on an informal basis because many colleges and universities have not developed the necessary, formal structural supports to integrate the new contingent majority; as a result, this new majority may be facing less-than-adequate working conditions (Kezar & Sam, 2013). This evidence has led many to ask the following question: *How do contingent faculty impact student outcomes?*

A new faculty model?

Tenure-line faculty—specialize only in research.

Full-time contingent instructors—provide mix of research and instruction.

Part-time contingent faculty—teach required or specialized courses and technical training.

Quality of Instruction and Effects on Student Outcomes

Literature on the relationship between instructor quality and student outcomes in higher education is scarce. What research does exist generally relies upon aggregate data that do not include instructor-level characteristics, but, instead, rely on grouping instructors by rank, such as contingent versus tenure or tenure-track faculty (Bettinger, 2010). The findings from this research are mixed.

Some evidence indicates that the presence of adjuncts or other non-tenure-track faculty may reduce graduation and student persistence rates (Ehrenberg & Zang, 2005; Bettinger & Long, 2006) and may lead to grade inflation (Johnson, 2011). These effects may be most pronounced at public master's institutions and community colleges, and in cases where part-time contingent faculty are teaching first-year students (Ehrenberg & Zang, 2005; Bettinger & Long, 2006; Eagan & Jaeger, 2009; Jacoby, 2006). Those skeptical of the quality of contingent faculty instruction explain these findings by pointing out that contingent faculty are less likely to have doctorates and may be less committed to their work because of its part-time nature and other work commitments that they may have (Umbach, 2006).

On the other hand, however, some research demonstrates that contingent faculty may actually increase student interest in a subject and subsequent course-taking, and they may enhance learning experiences (Bettinger & Long, 2010). Researchers explain these findings by pointing to the greater likelihood that contingent faculty have current or past professional experience in the field, and the likelihood that they spend more time on instruction than their full-time, tenure-track counterparts, who must devote more energy to research endeavors (Figlio, Schapiro, & Soter, 2015).

Although the verdict on the question of instructor quality may still be out, it is clear that contingent faculty are hired for—and operate within—a very different set of conditions than their tenure or tenure-track counterparts. Those conditions may be a contributing factor to some findings that contingent faculty have a negative impact on student outcomes. This relationship may vary, however, by type of institution and also by type of contingent faculty (i.e., full time versus part time and by contract type).

The Growth of Contingent Faculty

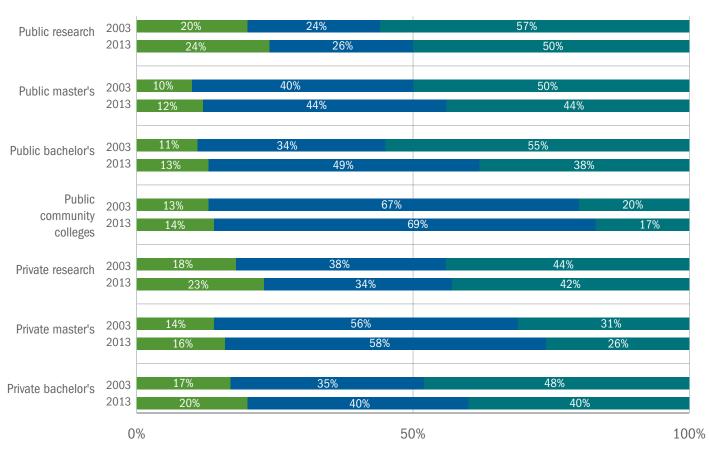
Colleges and universities have grown more dependent on contingent faculty throughout the past decade. Between 2003 and 2013, the share of non-tenure-track faculty rose among all types of institutions, with increases ranging from 2 to 8 percentage points for all institution types except public bachelor's colleges (see Figure 1 on next page). Among public bachelor's institutions, the contingent share rose by 17 percentage points, with most of the growth observed between 2003 and 2008 (13 percentage points compared to 4 percentage points from 2008 to 2013).

Some evidence indicates that the presence of adjuncts or other nontenure-track faculty may reduce graduation and student persistence rates and lead to grade inflation.

Other research demonstrates that contingent faculty may actually increase student interest in a subject and may enhance student learning experiences.

Figure 1 . Contingent faculty have increasingly joined the academic workforce across all types of institutions

Distribution of instructional faculty, by tenure status, FY 2003 and FY 2013





Source: Delta Cost Project IPEDS Database 1987–2013, 11-year matched set; IPEDS Employees by Assigned Position Survey, 2003, 2013.

Looking at the shares of instructional faculty, only research institutions had larger percentage-point growth in full-time contingent faculty compared to part-time contingent faculty (4 percentage points versus 2 percentage points at public research institutions and 5 percentage points versus -4 percentage points at private research institutions). Among most other institutional types, the share of part-time contingent faculty among total instructional faculty grew at the same rate as did full-time contingent faculty (private master's: both at 2 percentage points); moderately faster (public community colleges: 2 percentage points versus 1 percentage point; public master's: 2 versus 4 percentage points; private bachelor's: 3 versus 5 percentage points); or significantly faster (public bachelor's: 15 versus 2 percentage points).

While, overall, the percentage-point growth in the part-time contingent faculty share of total instructional faculty grew faster than the full-time contingent share, the percentage growth in full-time contingent faculty outpaced that of part-time contingent faculty across most institutional types. Private research institutions, however, saw only modest gains in the number of part-time contingent faculty (1,654 total faculty positions, or 4% between 2003 and 2013) compared to the increase in the number of full-time contingent faculty (9,995 total faculty positions, or 46%). At public bachelor's colleges, by contrast, the number of part-time contingent faculty grew faster than the number of full-time contingent faculty (5,751 part-time faculty, or 93%, versus 1,325 full-time faculty, or 68%) throughout the 10-year period, although both increased significantly (see Appendix Table A-1).

By 2013, contingent faculty (that is, non-tenure-track faculty) accounted for at least half of instructional faculty positions across all institutional types. In private master's colleges, nearly three-quarters of instructional faculty were contingent, and in community colleges, more than 8 out of 10 faculty members were non-tenure track. There is, however, significant variation within institutional groups, particularly among private master's and private bachelor's institutions, where the upper and lower quartile for the contingent faculty share of instructional faculty differed by 32 percentage points among private master's and 45 percentage points among private bachelor's institutions (see Appendix Figure A-1).

Among private master's and bachelor's institutions, contingent faculty have provided additional instructional capacity. These institutions netted an additional 6 FTE instructional faculty per 1,000 FTE students between 2003 and 2013, adding 7 to 8 FTE contingent faculty per 1,000 FTE students, while reducing the number of FTE tenure-line faculty per 1,000 FTE students by 1 to 2 (see Figure 2 on next page). Citing similar findings, Desrochers and Kirshstein (2014) note that "it is unclear how [such] changes have affected faculty course loads" in those institutional types adding capacity, adding that "expansion may have allowed colleges and universities to add new courses or course sections, decrease the course load of existing part-time instructors, or offload full-time faculty course loads onto part-timers."

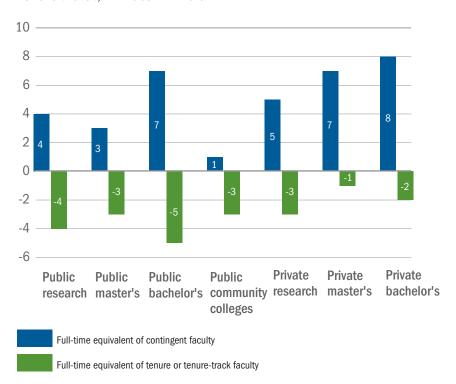
Faculty data presented in Desrochers and Kirshstein (2014) include staff whose function is primarily research or public service. Research and public service staff are excluded from the faculty data examined in this brief.



By 2013, contingent faculty accounted for at least half of instructional faculty positions across all institutional types.

Figure 2 . Contingent faculty have substituted for tenure or tenure-track faculty in most types of institutions

Change in average number of FTE instructional faculty per 1,000 FTE students, by tenure status, FY 2003–FY 2013



Source: Delta Cost Project IPEDS Database 1987–2013, 11-year matched set; IPEDS Employees by Assigned Position Survey, 2003, 2013.

At most types of institutions, however, the rise in the use of contingent faculty appears to have merely offset tenure-line faculty. At public and private research institutions and at public master's universities, the number of both tenure-line and contingent faculty increased, but the growth in tenure or tenure-track faculty positions did not keep pace with student enrollment increases; at public bachelor's institutions and community colleges, the number of tenure or tenure-track faculty actually declined.

Consequently, public master's and bachelor's colleges lost, on average, between 3 and 5 FTE tenure-line faculty per 1,000 FTE students from 2003 to 2013, while adding between 3 and 7 FTE contingent faculty per 1,000 FTE students. Public and private research universities, likewise, saw little to no net gain in the number of FTE instructional faculty per 1,000 FTE students. Public community colleges did not manage as well as four-year institutions; they employed 3 fewer FTE instructional faculty per 1,000 FTE students compared to 2003. Among community colleges, growth in the number of contingent faculty did not keep pace with the decrease in the number of tenure-line faculty; at the same time, student enrollment surged, due largely to the recession.

Faculty Jobs in 2013: The Non-tenured Majority

The academic year 2012–13 represents the first time that information was reported on contract length in IPEDS, allowing for greater precision in analyzing the specific types of arrangements in which contingent faculty find themselves. In this section, we briefly consider both full-time and part-time non-tenure-track faculty in the following categories:

- Multiyear contract. Faculty with a contract or employment agreement that is in effect for more than one year wherein subsequent years of the contract may be contingent upon other factors, such as the appropriation of funds.
- Annual or less than one-year contract. Faculty with an annually-renewable contract or employment agreement that is in effect for one year or for partial-year periods, such as a single semester, quarter, term, block, or course.
- Without-faculty status. Faculty who do not have—or who are not eligible to have—faculty status, including those in institutions with no tenure system.

Overall, part-time positions of one year or less were the most common non-tenure-track assignments, ranging from 19% of all faculty positions at public research institutions to 50% of all faculty positions at community colleges (see Figure 3 on next page). Many institution types also regularly employed part-time faculty without faculty status: such appointments accounted for 19% of all instructional faculty positions at private master's colleges, 17% at community colleges, 15% at public bachelor's colleges, and 12% at private bachelor's colleges. Full-time, non-tenure-track appointments, including multiyear contracts and contracts of one year or less, were more typical at public and private research institutions and at private bachelor's colleges, comprising more than 20% of all instructional faculty.

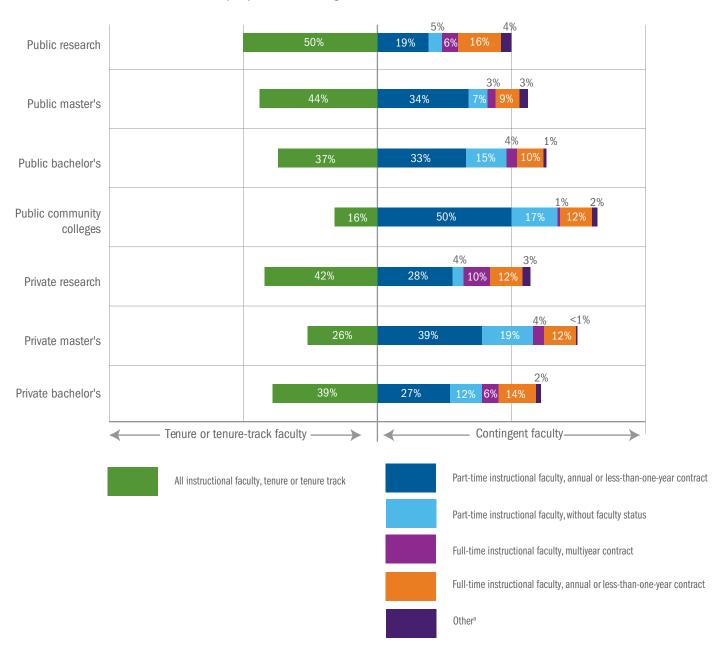
Part-time positions of one year or less were the most common non-tenure-track assignments, ranging from:

19% of all faculty positions at public research institutions

to 50% of all faculty positions at community colleges.

Figure 3 . Part-time annual or less-than-one-year contracts make up the largest share of non-tenure-track positions at all types of institutions

Distribution of instructional faculty, by contract length, FY 2013



Note. ^a Other represents smaller categories, including full-time instructional faculty without faculty status and part-time instructional faculty, multiyear contract.

Source: Delta Cost Project IPEDS Database 1987-2013, unmatched set.

An examination of the number of FTE faculty reveals some additional findings about college faculties. Relative to the number of students, college faculties at private colleges and universities are larger than their public counterparts. In 2013, private institutions employed, on average, between 72 and 95 faculty members per 1,000 students, compared to 54 to 61 faculty members per 1,000 FTE students at public institutions (see Table 1). Other key findings include the following:

- Although public research institutions reported the highest percentage of tenureline faculty (50%), the number of such appointments per 1,000 FTE students was considerably lower compared to those at private research institutions (38 tenure-line faculty versus 52 tenure-line faculty).
- Research universities heavily use graduate assistants to provide instruction, with public institutions employing 10 FTE graduate assistants per 1,000 FTE students, and private institutions employing 7 FTE graduate assistants per 1,000 FTE students.2
- Private research universities use full-time, multiyear positions more than other types of institutions, reporting an average of 12 such assignments per 1,000 FTE students in 2013—nearly double that of the institution type with the next highest number: private bachelor's institutions with 7 per 1,000 FTE students.
- As noted earlier, community colleges had the largest share of part-time faculty of one year or less (50% of all faculty positions). In terms of the number of faculty relative to student enrollment, community colleges employed 16 part-time faculty with annual or shorter contracts per 1,000 FTE students.

Table 1. Private institutions have larger college faculties relative to student enrollment than their public counterparts

Average number of FTE instructional faculty per 1,000 FTE students, by contract length, FY 2013

	Total	Tenure or tenure track	Full- time, multi- year contract	Full-time, annual or less than one-year contract	Part-time, annual or less than one-year contract	Part- time, without faculty status	Other ^a	Graduate assistants
Public research	61	38	4	12	5	1	1	10
Public master's	54	34	2	8	7	2	1	1
Public bachelor's	59	34	4	9	8	3	1	0
Community colleges	57	15	1	17	16	7	1	0
Private research	95	52	12	13	13	3	2	7
Private master's	72	30	6	13	15	8	0	1
Private bachelor's	82	41	7	17	10	5	2	0

Note. Other represents smaller categories, including full-time instructional faculty without faculty status and part-time instructional faculty, multiyear contract.

Source: Delta Cost Project IPEDS Database 1987–2013, unmatched set.

Includes only graduate assistants responsible for teaching.

How Does the Concentration of Contingent Faculty Differ Based on **Institutional Characteristics?**

As described in the previous section, colleges and universities are increasingly relying on contingent faculty, but are there institutions with certain characteristics depending more heavily on them? This section explores the question of whether any systematic relationships exist between observed measures and the concentration of contingent faculty by describing the relationship between the use of contingent faculty and different institutional characteristics. Specifically, this section examines the contingent faculty share of the academic workforce by the following characteristics: flagship status, region, degree of urbanization (urban versus rural), acceptance rate of institution, share of total enrollment that is full time, and percentage of undergraduates receiving Pell Grants.

Flagship status

Non-tenure-track faculty have, to a certain extent, become the norm at public flagship universities, which often are perceived as the preeminent institutions in state higher education systems. In 2013, across all 50 flagship institutions, 46% of all faculty were contingent (compared to 50% at non-flagship public research institutions; see Figure 4 on next page). At 16 flagship institutions, non-tenure-track faculty comprised more than half of all faculty positions, with the highest concentrations of contingent faculty observed at University of Washington (68%), University of Michigan (61%), and University of Missouri-Columbia (60%). In contrast, non-tenure-track faculty accounted for no more than one-third of instructional faculty positions at seven flagship institutions, with the lowest concentrations reported at University of Nebraska-Lincoln (21%), University of Wyoming (26%), and University of Kentucky (26%).

Public flagship institutions also showed variation in the use of contingent faculty by employment status. In eight flagship institutions, part-time contingent faculty represented at least one-third of all instructional faculty, with the highest concentrations reported at University of Rhode Island (44%), University of Alaska-Fairbanks (42%), and University of Nevada-Reno (40%). At the opposite end, part-time contingent faculty comprised no more than 10% of instructional faculty positions at 11 flagship institutions, with the lowest concentrations reported at University of Utah (1%) and University of Delaware (3%).



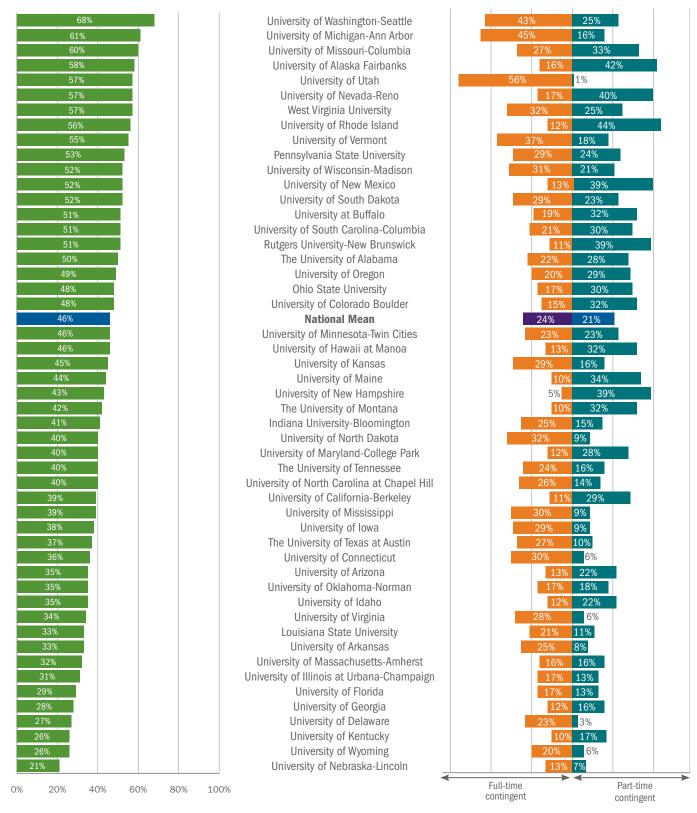
Non-tenure-track faculty have to a certain extent become the norm at public flagship universities.

In 2013, across all 50 preeminent institutions in state higher education systems, 46% of faculty were contingent.

Figure 4. Contingent faculty represented the majority of all faculty positions in 16 public flagship institutions

Contingent faculty share of instructional faculty, by flagship institution, FY 2013

Full-time versus part-time contingent faculty share of instructional faculty, by flagship institution, FY 2013



Source: Special tabulation of Delta Cost Project IPEDS Database, 2013, ungrouped.

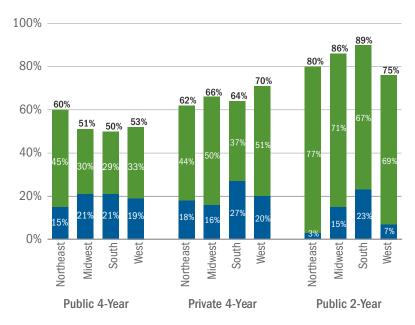
Region and urbanicity

Colleges and universities in the South consistently had the lowest percentage of part-time contingent faculty across all three sectors in 2013. At these southern institutions, part-time contingent staff represented 29% of total instructional faculty at public four-year institutions, 37% at private four-year institutions, and 67% at public two-year institutions (see Figure 5). In contrast, concentrations of part-time contingent faculty were the greatest in the Northeast for public four-year and public two-year institutions (45% and 77%, respectively) and in the West for private four-year institutions (51%).

Differences in the overall concentration of contingent faculty as a function of geographic region, however, were not consistent across types of postsecondary institutions. For public four-year institutions, concentrations of contingent faculty were highest in the Northeast (60%), whereas in the Midwest, South, and West, slightly more than 50% of all faculty were non-tenure track. At private four-year institutions, concentrations of contingent faculty were highest in the West (70%); all other regions averaged between 62% and 66%. Finally, among public two-year institutions, contingent faculty shares were highest in the South and Midwest: at 89% and 86%, respectively, compared with the Northeast and West (at 80% and 75%, respectively).

Figure 5. Total contingent faculty shares revealed little relationship with geographic region, but southern institutions were least likely to employ part-time contingent faculty

Full-time and part-time contingent faculty shares of instructional faculty, by region, FY 2013



Source: Delta Cost Project IPEDS Database 1987-2013, unmatched set.

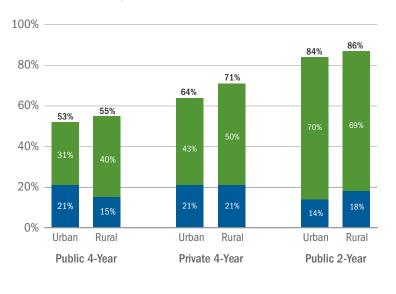
Part-time contingent faculty share of instructional faculty Full-time contingent faculty share of instructional faculty

Public and private four-year institutions in rural settings were more likely to have higher shares of part-time contingent faculty than those in urban areas. In 2013, 40% of instructional faculty at rural public four-year institutions were part-time contingent compared to 31% among their urban counterparts (see Figure 6). Among private four-year colleges and universities, part-time contingent staff represented 50% of total instructional faculty at rural institutions but only 43% at urban institutions.

Although there was variation in the use of full-time and part-time contingent faculty, there appears to be no discernable difference in the overall concentration of contingent faculty between urban and rural institutions. In 2013, neither public four-year institutions nor community colleges varied substantially in their concentrations of contingent faculty by urban versus rural locale (53% versus 55% at public four-year institutions; 84% versus 86% at public two-year institutions). Private four-year institutions showed small differences in contingent faculty shares, with 64% contingent faculty in urban institutions and 71% in rural institutions.

Figure 6. Rural four-year colleges and universities had larger shares of part-time contingent faculty at four-year institutions

Full-time and part-time contingent faculty shares of instructional faculty, urban versus rural, FY 2013



Part-time contingent faculty share of instructional faculty Full-time contingent faculty share of instructional faculty

Source: Delta Cost Project IPEDS Database 1987-2013, unmatched set.

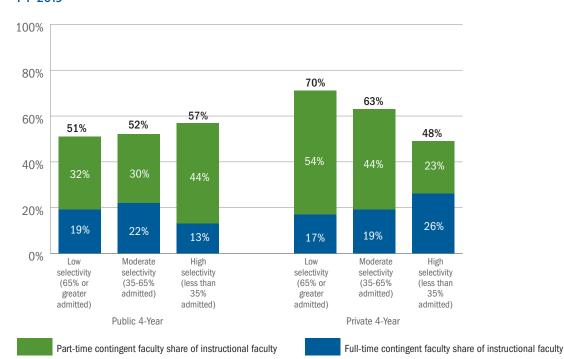
Admission rate

Less selective private four-year colleges were more likely to have higher concentrations of contingent faculty than more selective private institutions. In 2013, among private institutions with the highest admission rates (65% or greater), 70% of instructional faculty were contingent compared to 63% for private institutions with moderate admission rates (between 35% and 65%) and 48% for more selective private institutions (with admission rates below 35%) (see Figure 7).

Less selective private four-year colleges were also more likely to have higher concentrations of part-time contingent faculty. Part-time contingent faculty represented 54% of all instructional faculty at colleges with the lowest selectivity compared to 44% and 23% among moderately and highly selective colleges, respectively. Public four-year institutions, in contrast, showed virtually no relationship between admission rate and the overall contingent share of instructional faculty, although the percentage of part-time contingent faculty was highest at the institutions with the highest selectivity (44% compared to 30% and 32% for moderately selective and less selective institutions, respectively).

Figure 7. At private four-year institutions, as selectivity increases, reliance upon contingent faculty decreases

Full-time and part-time contingent shares of instructional faculty, by admission rate, FY 2013



Source: Delta Cost Project IPEDS Database 1987-2013, unmatched set.

In 2013, 70% of instructional faculty in private institutions with the highest admission rates were contingent.

Students at risk of noncompletion

Part-time and low-income students often are at risk of not persisting in and graduating from college. At both four-year and two-year institutions, the six-year graduation rate for part-time students is less than half of that for full-time students (Complete College America, 2011). Those same students are also more likely to be low-income and to attend less selective institutions (Berkner et al., 2002). Low-income students are nearly one-half as likely as their middle-income peers to graduate from college in 6 years and one-sixth as likely to graduate as students from high-income households (Mortenson, 2007). Finally, as the concentration of low-income students increases, graduation rates decrease. This trend is consistent across institution types (Horn, 2006).

Private four-year institutions with the largest share of Pell Grant recipients often considered at risk of noncompletion also had the highest concentration of contingent faculty.

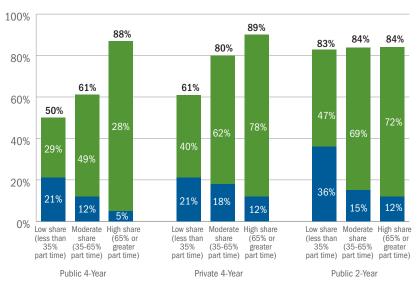
Colleges and universities with larger proportions of students at risk of noncompletion generally were more likely to have higher overall concentrations of contingent faculty and, in particular, concentrations of part-time contingent faculty (see Figure 8 on next page). This relationship was particularly pronounced at private four-year institutions: in 2013, 89% of instructional faculty at private four-year colleges with the biggest share of part-time students (65% or greater) were non-tenure-track, compared to 80% at private institutions with moderate shares (between 35% and 65%) and 61% at private institutions with the lowest shares (below 35%). Likewise, part-time contingent faculty represented 78% of all instructional faculty at private four-year colleges with the biggest share of part-time students, whereas at private four-year institutions with moderate and the lowest shares of part-time students, part-time, non-tenure-track faculty represented 62% and 40% of instructional faculty, respectively. With respect to low-income students, at private four-year colleges with the largest percentage of undergraduates receiving Pell Grants, 81% of faculty were contingent (59% part time) compared to 77% contingent (56% part time) and 59% contingent (40% part time) for private institutions with moderate and lower shares, respectively.

At public institutions, the differences were somewhat less straightforward regarding the concentration of contingent faculty as a function of the percentage of students at risk of noncompletion. Among four-year institutions, those with the largest shares of part-time students also reported higher concentrations of contingent faculty (88% versus 61% and 50% for the middle and low categories, respectively) and part-time contingent faculty (82% versus 49% and 29% for the middle and low categories, respectively); however, there was no discernable pattern with respect to the percentage of undergraduates receiving Pell Grants.

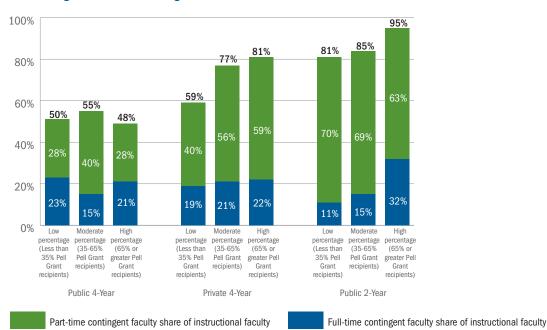
Among public two-year colleges, there was no clear relationship between the share of parttime students and the overall concentration of contingent faculty (across all three categories, more than 80% of instructional faculty were reported as contingent); however, there appears to be a positive relationship with respect to the share of part-time, non-tenure-track faculty. Part-time contingent faculty represented 72% of total instructional faculty in the highest category of part-time share of total enrollment, but 69% and 47% in the lower two categories. With respect to low-income students, community colleges with the largest share of Pell Grant recipients had larger concentrations of contingent faculty (95% versus 85% and 81% for the middle and low categories, respectively), although there was no relationship in connection with part-time faculty.

Figure 8. Colleges and universities with higher shares of students at risk of noncompletion also have higher shares of contingent faculty, particularly among private four-year and public two-year institutions

Full-time and part-time contingent shares of instructional faculty, by part-time share of total enrollment, FY 2013



Full-time and part-time contingent shares of instructional faculty, by percentage of undergraduates receiving Pell Grants, FY 2013



Source: Delta Cost Project IPEDS Database 1987-2013, unmatched set.

Conclusions

Echoing previous research on contingent faculty (Desrochers & Kirshstein, 2014; American Federation of Teachers, 2009; Curtis & Thornton, 2013), this brief shows that colleges and universities are increasingly reliant on contingent faculty. Contingent faculty represent the majority of all faculty at most institution types, in every region of the country, and in both urban and rural colleges and universities. Contingent faculty are the norm, and it is highly unlikely that this trend will reverse itself.

Of potential concern is the fact that students most at risk of noncompletion, such as parttime and low-income students, are more likely to be enrolled in institutions with higher concentrations of contingent faculty (and part-time contingent faculty in particular). Although the research on the quality of instruction is mixed, part-time and low-income students are in greater need of support from their instructors, yet they are less likely than their fulltime, higher-income peers to engage in those services (Walpole, 2003). Contingent faculty, especially those who work part time and who themselves are less likely to be integrated within and supported by their institution, may be less able to-and, indeed, have been found less likely to—provide those services to students (Kezar & Sam, 2013; Umbach, 2006). If both the student population and instructors are under-resourced, it is unlikely that faculty will be able to devote their best to scholarly work or instruction, and, in turn, students will be less likely to achieve their greatest potential.

Higher education leaders have increasingly turned to contingent faculty to meet student demand, increase flexibility, and reduce costs—but does aggressively pursuing a contingentheavy workforce really lead to cost reductions, or are costs merely being shifted elsewhere? Deeper analysis of how the use of contingent faculty relates to institutional spending is needed. In a companion brief, we shed light on that question by investigating how institutional spending varies as a function of the concentration of contingent faculty.

Contingent faculty represent the majority of all faculty at most institutional types, in every region of the country, and in both urban and rural colleges and universities.

Contingent faculty are the norm, and it is highly unlikely that this trend will reverse itself.

About the Authors

Steven Hurlburt is a senior researcher at American Institutes for Research (AIR) and director of the Delta Cost Project. His research focuses on postsecondary finance and education policy. Having contributed to the Delta Cost Project since its inception in 2007, he plays a leading role in producing the Delta Cost Project's annual Trends in College Spending reports and other publications on higher education finance. Hurlburt has presented on the Delta Cost Project for several professional organizations, including the Association for Institutional Research, the Association for the Study of Higher Education, and the Education Writers Association. In addition to his work on the Delta Cost Project, Hurlburt is currently co-director of the Bill & Melinda Gates Foundation's Frontier Set Evaluation—a four-year, mixedmethods evaluation of 35 two- and four-year higher education institutions simultaneously implementing a set of three student success initiatives.

Michael McGarrah is a former research associate at AIR, and is now at the Aspen Institute's National Commission on Social, Emotional, and Academic Development. At AIR, McGarrah served as project manager for the College and Career Readiness and Success Center, and product development leader for SEL Solutions. Prior to working at AIR, McGarrah was a Fulbright grantee and a research assistant at the Institute of Child Development at the University of Minnesota.



Steven Hurlburt



Michael McGarrah

References

- American Federation of Teachers. (2009). *American academic: The state of the higher education workforce* 1997–2007. Washington, DC: Author. Retrieved from http://www.aft.org/sites/default/files/aa highedworkforce0209.pdf.
- Berkner, L., He, S., & Cataldi, E.F. (2002). *Descriptive summary of 1995–96 beginning postsecondary students: Six years later.* Washington, DC: National Center for Education Statistics.
- Bettinger, E. P., & Long, B. T. (2010). Does cheaper mean better? The impact of using adjunct instructors on student outcomes. *The Review of Economics and Statistics*, 92(3), 628–656.
- Bettinger, E. P., & Long, B. T. (2006). The increasing use of adjunct instructors at public institutions: Are we hurting students? In Ehrenberg, R. G. (Eds.), What's happening to public higher education? The shifting financial burden (51–69). Baltimore: Johns Hopkins University Press.
- Complete College America. (2011). *Time is the enemy.* Washington, DC: Author. Retrieved from http://www.completecollege.org/docs/Time_ls_the_Enemy_Summary.pdf.
- Curtis, J. W. (2014). The employment status of instructional staff members in higher education, fall 2011. Washington, DC: American Association of University Professors.
- Curtis, J. W., & Thornton, S. (2013). Here's the news: The annual report on the economic status of the profession 2012–13. *Academe*, 99(2), 4–19.
- Desrochers, D. M., & Kirshstein, R. (2014). *Labor intensive or labor expensive? Changing staffing patterns in higher education.* Washington, DC: Delta Cost Project, American Institutes for Research.
- Eagan, M. K., & Jaeger, A. J. (2009). Effects of exposure to part-time faculty on community college transfer. Research in Higher Education, 50(2), 168–188.
- Ehrenberg, R. G., & Zhang, L. (2005). Do tenured and tenure-track faculty matter? *Journal of Human Resources*, 40(3), 647–659.
- Figlio, D. N., Schapiro, M. O., & Soter, K. B. (2015). Are tenure track professors better teachers? *Review of Economics and Statistics*, 97(4), 715–724.
- Horn, L. (2006). Placing college graduation rates in context: How 4-year college graduation rates vary with selectivity and the size of low-income enrollment (NCES 2007–161). Washington, DC: National Center for Education Statistics, U.S. Department of Education.
- Jacoby, D. (2006). Effects of part-time faculty employment on community college graduation rates. *The Journal of Higher Education*, 77(6), 1081–1103.
- Johnson, I. Y. (2011). Contingent instructors and student outcomes: An artifact or fact? Research in Higher Education, 52(8), 761–785.

- Kezar, A., & Maxey, D. (2015). Revealing opportunities and obstacles for changing non-tenuretrack faculty practices: An examination of stakeholders' awareness and contradictions. The Journal of Higher Education, 86(4), 564-594.
- Kezar, A., & Sam, C. (2013). Institutionalizing equitable policies and practices for contingent faculty. The Journal of Higher Education, 84(1), 56-87.
- McKenna, L. (2015, May 26). The cost of an adjunct. The Atlantic. Retrieved from http://www. theatlantic.com/education/archive/2015/05/the-cost-of-an-adjunct/394091/.
- Monks, J. (2004). The relative earnings of contingent faculty in higher education (CHERI Working Paper #59). Retrieved from http://digitalcommons.ilr.cornell.edu/cheri/22/.
- Mortenson, T. (2007). Bachelor's degree attainment by age 24 by family income quartiles, 1970 to 2005. Oskaloosa, IA: Postsecondary Education Opportunity.
- National Center for Education Statistics. (2001). Institutional policies and practices: Results from the 1999 national study of postsecondary faculty, institutional survey. (NCES Working Paper No. 2001-201). Washington, DC: Author.
- Snyder, T. D., & Dillow, S. A. (2015). Digest of Education Statistics 2013 (NCES 2015–011). Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.
- Umbach, P. D. (2006). How effective are they? Exploring the impact of contingent faculty on undergraduate education. The Review of Higher Education, 30(2), 91-123.
- Walpole, M. (2003). Socioeconomic status and college: How SES affects college experiences and outcomes. The Review of Higher Education, 27(1), 45-73.
- Yakoboski, P. J. (2015). The career experiences of academics in adjunct faculty positions. New York, NY: TIAA-CREF Institute.

Appendix

			71 7		s, 2003–201					
					Absolute change			Percent change		
	2003	2008	2013	2003- 2008	2008- 2013	2003- 2012	2003- 2008	2008- 2013	2003 2013	
ublic research										
Total instructional faculty	249,918	275,053	296,985	25,135	21,932	47,067	10.1%	8.0%	18.8%	
Tenure or tenure- track faculty	141,248	147,523	148,942	6,275	1,419	7,694	4.4%	1.0%	5.4%	
Contingent faculty	108,670	127,530	148,043	18,860	20,513	39,373	17.4%	16.1%	36.29	
Full-time contingent faculty	49,741	59,207	71,128	9,466	11,921	21,387	19.0%	20.1%	43.0%	
Part-time contingent faculty	58,929	68,323	76,915	9,394	8,592	17,986	15.9%	12.6%	30.5%	
Graduate assistants	130,062	157,015	132,425	26,953	-24,590	2,363	20.7%	-15.7%	1.8%	
ublic master's										
Total instructional faculty	134,733	148,729	161,932	13,996	13,203	27,199	10.4%	8.9%	20.29	
Tenure or tenure- track faculty	67,109	70,417	71,241	3,308	824	4,132	4.9%	1.2%	6.29	
Contingent faculty	67,624	78,312	90,691	10,688	12,379	23,067	15.8%	15.8%	34.19	
Full-time contingent faculty	13,494	17,308	19,627	3,814	2,319	6,133	28.3%	13.4%	45.49	
Part-time contingent faculty	54,130	61,004	71,064	6,874	10,060	16,934	12.7%	16.5%	31.39	
Graduate assistants	11,140	15,449	12,157	4,309	-3,292	1,017	38.7%	-21.3%	9.19	
ublic bachelor's										
Total instructional faculty	18,004	21,988	24,340	3,984	2,352	6,336	22.1%	10.7%	35.29	
Tenure or tenure- track faculty	9,881	9,079	9,141	-802	62	-740	-8.1%	0.7%	-7.5%	
Contingent faculty	8,123	12,909	15,199	4,786	2,290	7,076	58.9%	17.7%	87.19	
Full-time contingent faculty	1,956	2,518	3,281	562	763	1,325	28.7%	30.3%	67.79	
Part-time contingent faculty	6,167	10,391	11,918	4,224	1,527	5,751	68.5%	14.7%	93.3%	
Graduate assistants	101	141	122	40	-19	21	39.6%	-13.5%	20.89	
ublic community olleges										
Total instructional faculty	316,514	345,133	364,164	28,619	19,031	47,650	9.0%	5.5%	15.19	
Tenure or tenure- track faculty	64,053	61,933	61,070	-2,120	-863	-2,983	-3.3%	-1.4%	-4.79	
Contingent faculty	252,461	283,200	303,094	30,739	19,894	50,633	12.2%	7.0%	20.19	
Full-time contingent faculty	40,579	47,927	50,968	7,348	3,041	10,389	18.1%	6.3%	25.69	
Part-time contingent faculty	211,882	235,273	252,126	23,391	16,853	40,244	11.0%	7.2%	19.09	
Graduate assistants	0	0	0							

Table A-1. Number of instructional faculty, by tenure status, 2003–2013 Private research Total instructional 120,311 123,684 136,878 3,373 13,194 16,567 2.8% 10.7% 13.8% faculty Tenure or tenure-1,897 track faculty 53,162 56,183 58,080 3,021 4,918 5.7% 3.4% 9.3% Contingent faculty 67,149 67,501 78,798 352 11,297 11,649 0.5% 16.7% 17.3% Full-time contingent faculty 21,950 25,889 31,945 3,939 6,056 9,995 17.9% 23.4% 45.5% Part-time contingent 41,612 46,853 -3,587 5,241 1,654 3.7% faculty 45,199 -7.9% 12.6% Graduate assistants 26,688 26,457 -10,440 -231 36,897 10,209 38.3% -28.3% -0.9% Private master's Total instructional 94,946 118,154 23,208 12,462 35,670 24.4% 37.6% faculty 130,616 10.5% Tenure or tenure-29,107 31,748 34,398 2,641 2,650 5,291 9.1% 8.3% 18.2% track faculty 86,406 46.1% Contingent faculty 65,839 96,218 20,567 9,812 30,379 31.2% 11.4% Full-time contingent 13,012 27.0% 60.9% faculty 16,526 20,931 3,514 4,405 7,919 26.7% Part-time contingent 52,827 69,880 75,287 17,053 5,407 22,460 32.3% 7.7% 42.5% faculty 1,530 2,260 2,327 730 67 797 47.7% 3.0% 52.1% Graduate assistants Private bachelor's Total instructional 59,932 68,007 75,534 8,075 7,527 15,602 13.5% 11.1% 26.0% faculty Tenure or tenure-28,663 29,843 30,301 1,180 458 1,638 4.1% 1.5% 5.7% track faculty 31,269 38,164 45,233 6,895 7,069 13,964 22.1% 18.5% 44.7% Contingent faculty Full-time contingent 9,994 11,865 14,826 1,871 2,961 4,832 18.7% 25.0% 48.3% faculty Part-time contingent

Source: Delta Cost Project IPEDS Database 1987-2013, 11-year matched set; IPEDS Employees by Assigned Position Survey, 2003, 2008, 2013.

5,024

61

4,108

34

26,299

347

21,275

286

faculty

Graduate assistants

30,407

381

23.6%

21.3%

9,132

95

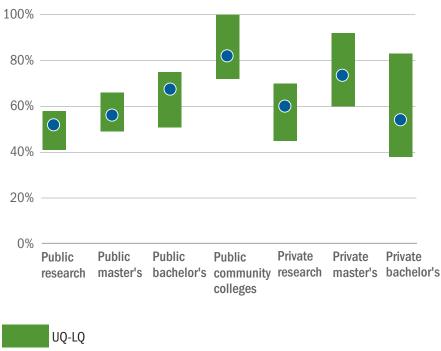
15.6%

9.8%

42.9%

33.2%

Figure A-1. Contingent faculty share of instructional faculty, by institutional grouping, FY 2013



UQ-LQ Median

Note. 'UQ-LQ' represents the interquartile range, equal to the difference between the upper and lower quartiles.

Source: Delta Cost Project IPEDS Database 1987–2013, 11-year matched set; IPEDS Employees by Assigned Position Survey, 2003, 2008, 2013.





TIAA-CREF Individual & Institutional Services, LLC, Teachers Personal Investors Services, Inc., and Nuveen Securities, LLC, Members FINRA and SIPC, distribute securities products.

TIAA Institute is a division of Teachers Insurance and Annuity Association of America (TIAA), New York, NY.

©2016 Teachers Insurance and Annuity Association of America-College Retirement Equities Fund (TIAA-CREF), 730 Third Avenue, New York, NY 10017